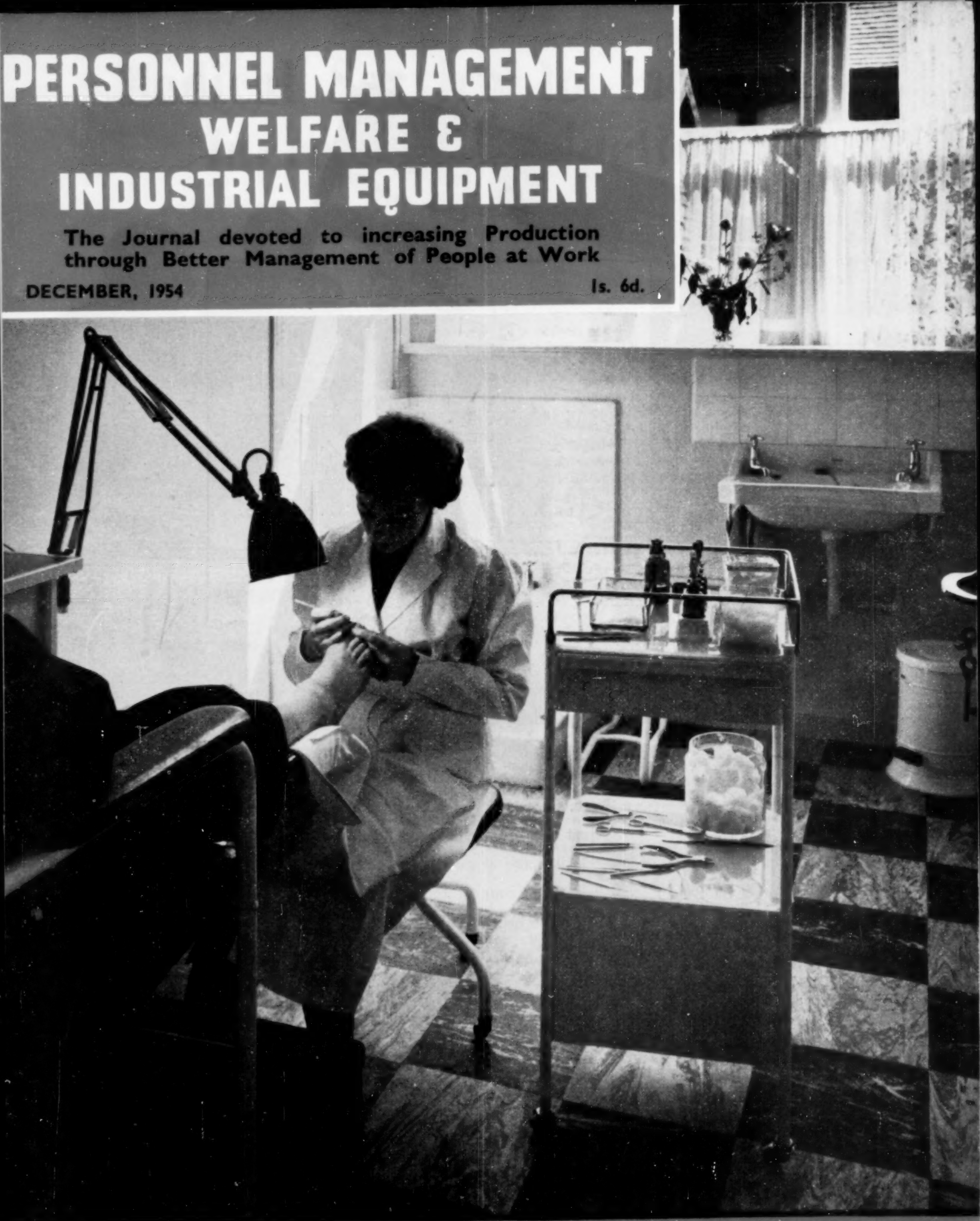
PERSONNEL MANAGEMENT WELFARE & INDUSTRIAL EQUIPMENT

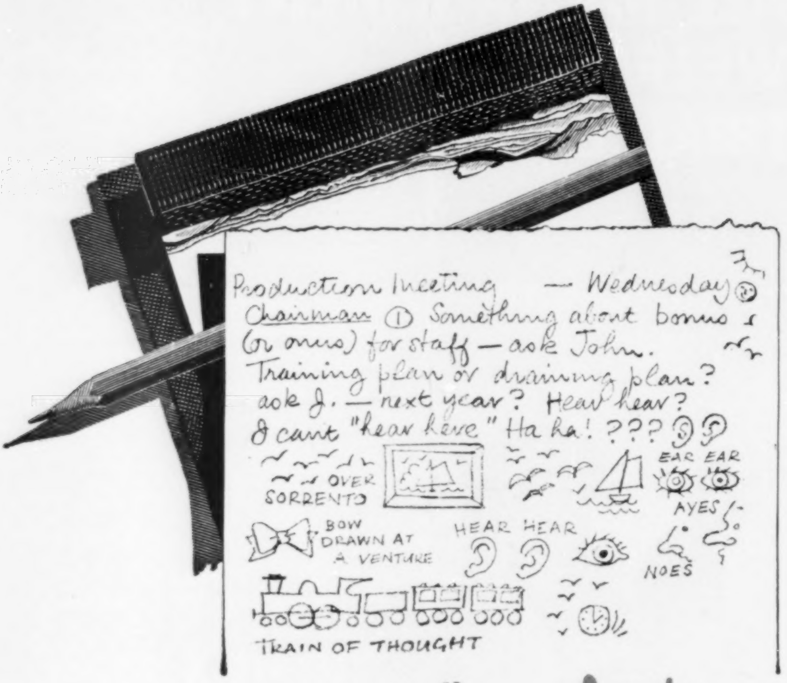
The Journal devoted to increasing Production through Better Management of People at Work

DECEMBER, 1954

1s. 6d.



Medicine De Luxe in the Factory (see page 292)


Production Meeting — Wednesday
Chairman ① Something about bonus (or onus) for staff — ask John.
Training plan or draining plan?
ask J. — next year? Hear hear?
I cant "hear here" Ha ha! ???
OVER SORRENTO
EAR EAR
AYES
BOW DRAWN AT A VENTURE
HEAR HEAR
NOES
TRAIN OF THOUGHT

"Hear here" my foot —— !

Only three people really know what's being said: the speaker and his two neighbours. The further you are down the table the more indistinct and incoherent each word becomes. Time, tempers, good brains are being wasted— just because useless noise is muffling up sensible sounds. All that's wanted is Cullum. Cullum recapture 'lost' sounds, and lose those that you don't want to hear. Talk to Cullum right away.

Sound control by CULLUM

THE ACOUSTIC CONSULTANTS & CONTRACTORS

Concessionnaires for ACOUSTI-CELOTEX

PROGRESS WITH QUIETNESS

HORACE W. CULLUM & CO. LTD., FLOWERS MEWS, LONDON, N.19 Tel. ARC 2662 (4 lines)

Medical Service to Industry Increases Production

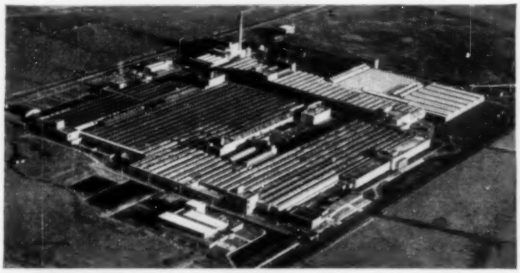
sickness-absence

reduced through specialised

medical supplies

In the first-aid treatment of accidents and sudden illnesses, the factory Medical or Welfare Department provides an invaluable service which has proved to have a directly beneficial effect upon production.

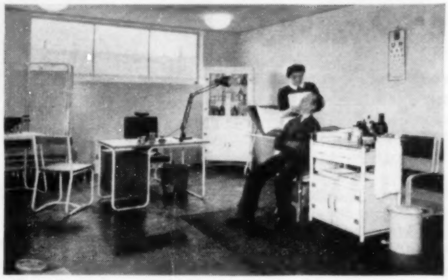
Calmic Limited, of Crewe and London, have for many years specialised in the equipment and medical supplies necessary to maintain an efficient modern Welfare Department, in factories of all sizes, and will gladly send a representative to advise you upon essential needs and to arrange for regular medical supplies.



In large industrial plants, idle machines due to sickness-absence can cause bottlenecks affecting many departments . . .

. . . the absence of one key-worker may prove of incalculable cost in interrupting continuity of production.

Absenteeism, a primary cause of concern to the personnel manager, in many cases is preventable.



A fully equipped Medical or Welfare Department, ready for all emergencies from minor ailments to the early treatment of serious accidents. The existence of such a Department directly influences attendance.

Industrial Medical Supplies
Calmic Limited
Crewe Hall • Crewe

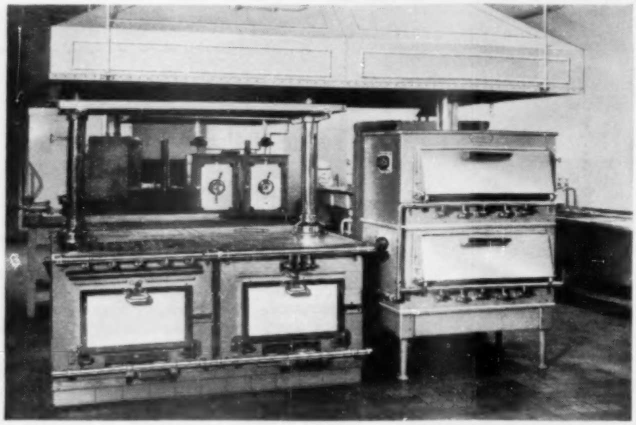
Many leading industrial concerns employ CALMIC Service of Supplies listed in this ready reference. Available to Medical, Personnel and Welfare Officers.

CREWE
Telephone
Crewe 3251-5

CALMIC LIMITED

LONDON
2 Mansfield Street, W.1
Telephone LANgham 8938-9

Choose **CARRON** for Canteen Kitchens

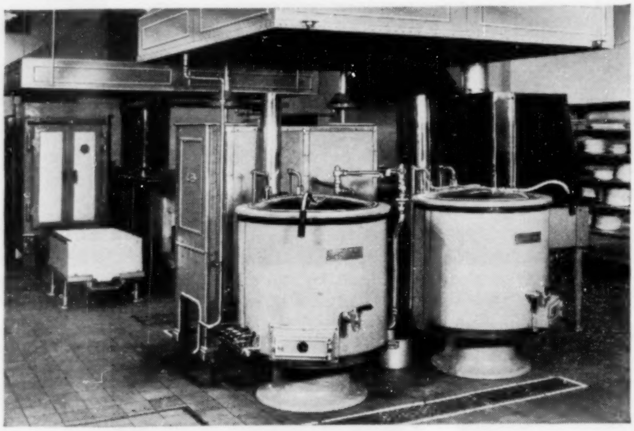


The kitchen of the staff canteen at Waterloo Station (SR) is equipped by Carron. Here is seen a Gas-heated Central Range having 4 externally heated ovens, each 24″ wide x 14″ high x 24″ deep, inside. To the right is the Carron Gas Pastry Oven having drop doors and pilot jet to each burner. Two Carron Gas-heated Steaming Ovens were also supplied.

... British Railways do

Two Carron Gas Boiling Pans, having the latest type of balance gear to lids, are seen in the foreground. Gas-heated Steaming Ovens, a Carron Fish Frying suite, and a Carron Gas-Roasting oven were also supplied.

Please write for full details.



CARRON

Carron Heavy Duty Cooking Equipment

COAL · COKE · STEAM · OIL · GAS · ELECTRICITY

Carron Company · Carron · Falkirk · Stirlingshire

AND LONDON, LIVERPOOL, MANCHESTER, NEWCASTLE AND GLASGOW

By Appointment
Ironfounders
To the late
King George VI

Showrooms & Sub-office: 15, Upper Thames Street, London, E.C.4. 22, 26, Redcross Street, Liverpool, 1. 125, Buchanan Street, Glasgow, C.1. Sub-office: 33, Bath Lane, Newcastle upon Tyne.

A.21

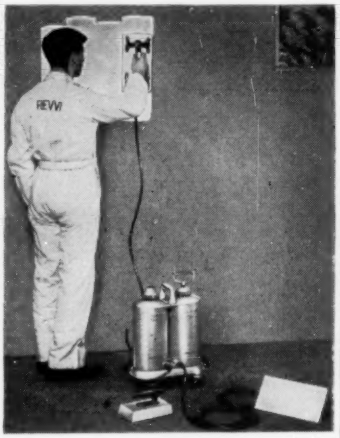
CUT PAINT CLEANING COSTS

WITH THE

"REVVI"

Wall Washing Machine

Improves Working Conditions
Stimulates Hygiene



Walls and ceilings can be washed cheaply and with the minimum of disorganisation by means of the REVVI washing machine.

A saving of at least one half of the normal labour costs is effected.

Being silent in operation and not requiring very much floor space, the REVVI machine does not distract the attention of persons working near it. For ease of movement, it is fitted with rubber-tyred castors. The water and cleaning solutions do not drip on to floors, machines or desks, so dust sheets are not needed.

The cylinders of the REVVI machine are filled with clear water and REVVI detergent solution respectively, and both water and solution are kept under pressure by a few strokes of a manually-operated air pump. A few minutes' pumping is sufficient to last the day's operations.

PRICE COMPLETE £55

For further details write or phone :

REVVI
LIMITED
70 Blackstock Road, London, N.4
Telephone : CANonbury 5246-7

DECEMBER 1954

**Personnel Management
Welfare and
Industrial Equipment**

MANAGEMENT OF PERSONNEL

How Teamwork Is Leading To Higher Productivity Robert McKinnon 287
An account of how firms all over Britain are co-operating in the work of the British Productivity Council

European Nations Exchange Their Management Ideas The Editor 290
Impressions of the recent European Management Conference at Torquay which was attended by 24 nations

Management Through The Supervisor's Eyes Discussion Leader 298
Running Suggestion Schemes Is A Matter of Tact

INDUSTRIAL EQUIPMENT AND MANAGEMENT

These Machines Help Creative Workers V. Bird 312

Equipment That Raises Output 307
*LIGHTING ★ VENTILATION ★ EFFICIENCY AIDS
HEATING ★ SAFETY ★ CANTEEN*

WELFARE TRAINING AND HEALTH

This Modern Medical Centre Welcomes Large Numbers Gerald Ward 292
An account of a new medical centre for 1,200 workers which provides everything from surgery to heat treatment

How To Take The Strain Off The "Human Machine" G. McPartlin 296
Describes how the problem of teaching workers how to lift and handle properly is being tackled in the U.K.

SAFETY · ACCIDENT PREVENTION · CIVIL DEFENCE

How To Keep The Shop-Floor Clean And *Safe* W. M. Halliday 299
Describes ways and means of removing impregnated dirt from the shop-floor, thus reducing a source of accidents

CANTEENS AND CATERING

Kitchen Essentials In The Medium Canteen L. Banham 303
A basic guide to the equipment needed in the canteen catering for 250 workers; second article of a series

NEWS AND READERS' SERVICE

Management At Work .. 294
Management Bookshelf .. 301
People At Work 302
Canteen Advice Bureau .. 304
Official Publications 314
December Management Diary 316

VOL. 21. No. 175. Published by Shaw Publishing Co. Ltd., 180 Fleet Street, London, E.C.4 (CHA. 8844) incorporating "Civil Defence Journal and ARP & NFS Review" and "Welfare," London.

Subscription rates: 20s. per year, post free, U.K. and Eire; 25s. per year overseas.

CHANGE OF SUBSCRIBER'S ADDRESS. Please inform the Publishers six clear weeks in advance and include present address as well as new address required.

ABIX CYCLE STANDS

A Quarter of a Century's experience in Cycle Stand Manufacture

ABIX Cycle Stands are constructed of steel throughout, stove-enamelled green. Roof sheeting is normally of galvanised corrugated sheet steel. If required, sheeting can be supplied in Aluminium, Asbestos or Robertson Protected Metal.
This is our type 'B' stand with 12" centres, 10' long, capacity 20 cycles.

Write for illustrated catalogue to :

ABIX (METAL INDUSTRIES) LTD.
Factory Equipment Specialists
**TAYBRIDGE HOUSE, TAYBRIDGE ROAD
BATTERSEA LONDON · S.W.11**
Telephone : BATtersea 8666/7

Action now!

At this moment legislation is being enacted in Parliament to lay down standards of hygiene in all places where food for the public is prepared or served.

Deosan has long offered a service to all concerned in every branch of the catering industry, however big or small. There's a Deosan product exactly suited to your needs.

For full details and the address of your nearest stockist, write to

DEOSAN LIMITED, Catering Hygiene Division,
42-46 Weymouth Street, London, W.1
(One of the Milton Group of Companies)

use DEOSAN

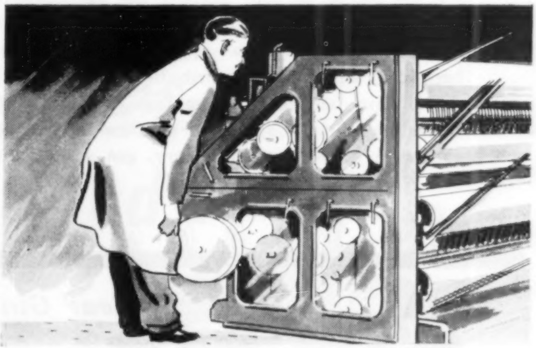
It costs much more to be sorry

The meshing teeth of machine-tool gears have caused many terrible injuries. Someone takes the cover off for inspection, someone bends over to lace a shoe — and the damage is done. A worker suffers, and you pay — in lost time, idle machinery, and compensation. By using "ARMOURPLATE" Glass you can often avoid accidents of this kind.

than safe

Here is a typical example

"ARMOURPLATE" Glass panels, glazed into the cover plate of this wool carding machine, enable a man to take a look without taking a risk; and without exposing anyone else to risk either. Moreover, because inspection is safe and simple, it is much more likely to be conscientiously carried out.



"ARMOURPLATE" glass gives a clear view of the job

PILKINGTON BROTHERS LIMITED

FOR FURTHER INFORMATION ON THE USE OF GLASS IN ENGINEERING, CONSULT THE TECHNICAL SALES AND SERVICE DEPARTMENT, ST. HELENS, LANCS. (ST. HELENS 4001), OR SELWYN HOUSE, CLEVELAND ROW, ST. JAMES'S, LONDON, S.W.1 (WHITEHALL 5672-6). SUPPLIES ARE AVAILABLE THROUGH THE USUAL TRADE CHANNELS. "ARMOURPLATE" IS A REGISTERED TRADE MARK OF PILKINGTON BROTHERS LIMITED.

1.13

CLEAR
PROFIT

Gas burns clear and clean. It does not waste its substance in smoke. By the time the gas comes to your burners the smoke has been put to work by the Gas Industry in a hundred different ways, all of them beneficial, all of them contributing to keep down your fuel costs. Apart from fighting unhealthy smog, the filthiest and the most expensive blanket in all history, gas gives you a clear answer to the question : What is the true cost of my fuel ? Your bill is for fuel used. Gas needs no special equipment for handling or storage, no replacement stocks, no extra labour to look after these things. Delivery is continuous, of legally guaranteed calorific value. Clearly, there are advantages about gas that you should consider in your plans.

Clear Guidance

THROUGH your Area Gas Board you can bring the full resources of the Gas Industry to bear on your fuel problem. The Boards' Industrial Gas Engineers are always available for consultation and their services are free. Get your secretary to fill in these details (or pin this advertisement to your letter heading) **and send to your Area Gas Board or to the Gas Council, 1 Grosvenor Place, London, S.W.1.**

NAME ....

....

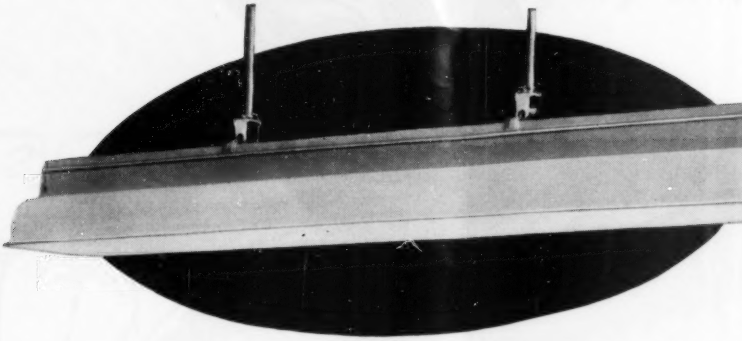
ADDRESS ....

....

WE NEED HEAT FOR .... No. 30

The Gas Industry makes the ***fullest*** *use of the nation's coal*

GC.G7A



You'll be glad it's

G.E.C.

There is a wide range of specially designed G.E.C. fluorescent fittings for every trade and industry. Simple to fit. Snap-action dismantling for quick, easy one-man maintenance. Consult your local contractor for best type of G.E.C. fitting . . . with of course Osram tubes.

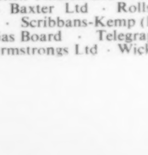
● *The General Electric Co Ltd, Magnet House, Kingsway, London WC2*

BORAXO

(BRAXO)

cleans DIRTY hands

The strong pilfer-proof dispenser ensures greatest economy in use.



Whenever hands become really dirty, they need Boraxo. It readily tackles ingrained dirt, grease and oil, does not harm the skin, and leaves the hands smooth and supple. The reputation of Boraxo is high among doctors and personnel officers. They like it because it is safe and efficient besides being economical.

• •

Free trial

2

Give Boraxo a trial in *your* works. Attach this coupon to your letterheading for a free sample and full information

Name of Executive..

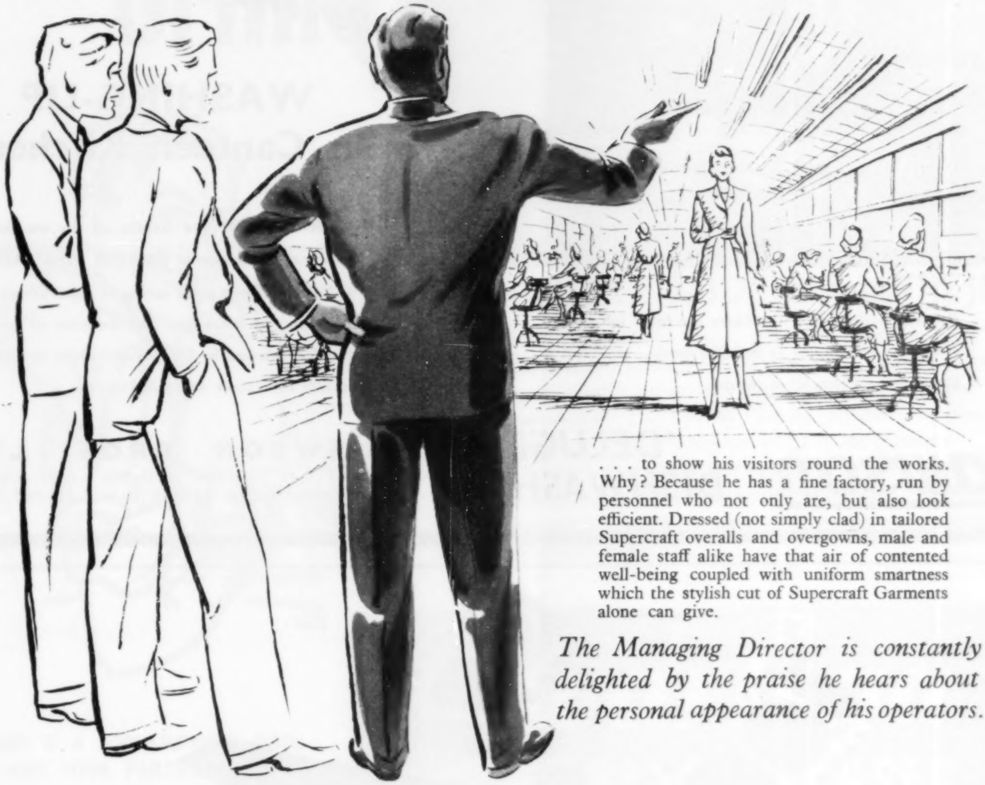
BORAX CONSOLIDATED, LIMITED

Regis House · King William St. · London EC4 · *Mincing Lane 7333*

803

Satisfied users of Boraxo include:—W. & T. Avery Ltd. Birmingham Aluminium Casting (1903) Co. Ltd · British Timken Ltd · J. B. Brooks & Co. Ltd. Marsh & Baxter Ltd · Rolls-Royce Ltd · Jaguar Cars Ltd · Scribbans-Kemp (Bakeries) Ltd · South Eastern Gas Board · Telegraph Condenser Co. Ltd. Vickers-Armstrongs Ltd · Wickman Ltd.

the managing director is PROUD....



. . . to show his visitors round the works. Why? Because he has a fine factory, run by personnel who not only are, but also look efficient. Dressed (not simply clad) in tailored Supercraft overalls and overgowns, male and female staff alike have that air of contented well-being coupled with uniform smartness which the stylish cut of Supercraft Garments alone can give.

The Managing Director is constantly delighted by the praise he hears about the personal appearance of his operators.

PRODUCED
FROM
LABORATORY
TESTED
MATERIALS

He has—of course—long known that

supercraft
is the operative word for
smartness

MAY WE RECOMMEND A COMPLETE SCHEME FOR FITTING OUT YOUR ORGANISATION WITH SUPERCRAFT OVERALLS?

Have you had your copy of our latest catalogue? If not, write to:

SUPERCRAFT (GARMENTS) LTD.
Central Sales Office: 19 STRATFORD ROAD, SHIRLEY, BIRMINGHAM
Telephone: Shirley 3809, stating to whom the catalogue should be addressed

Factories at Oldham and Manchester

Clean — without a doubt!

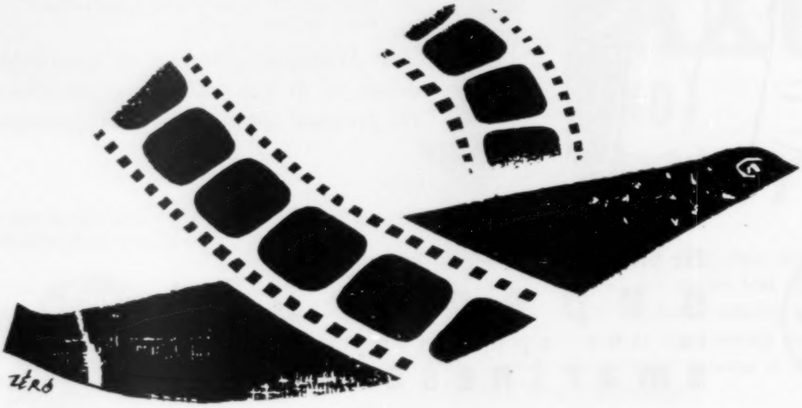
WASHING-UP in Canteen Kitchens

MODERN canteens now handle all the washing up mechanically. The use of DAWSON DISHWASHING MACHINES effects great saving in time, labour costs and absence of breakages. Furthermore all crockery and cutlery washed by Dawson machines satisfies the standards of hygiene demanded to-day.

★ **Dawson Dishwashing machines are made for all size canteens, catering for up to 1,000 meals. Descriptive literature will be sent on request.**

Dawson 'DELUGE' DISHWASHERS

DAWSON BROS. LTD
DEPT. P.M. · 406 RODING LANE SOUTH
WOODFORD GREEN · ESSEX · Tel. Wanstead 7777 (4 lines)



choose your own travel film show

for *free* loan from more than a hundred films on travel and transport subjects

listed in the 1954 CATALOGUE OF BRITISH TRANSPORT FILMS

NOW OUT write for your copy to the Films Officer · British Transport Commission · 25 Savile Row London W1

Grime doesn't pay!

CLEAN HANDS LEAD TO PRIDE IN THE JOB

You will know how true this is after you have installed SWARFEGA washing for your employees. It penetrates deep down into the pores and ***ingrained grime is gone in no time***—without scrubbing—saving valuable minutes on every wash. The employees will like its pleasant action . . . and it is the one ***antiseptic*** hand cleanser which actually helps cuts and abrasions to heal. All this and yet it is ***cheaper than*** soap or abrasive pastes! You should look into this . . .

Swarfega

ANTISEPTIC HAND CLEANSER

Ask your Merchant for a Sample -or send the Coupon -NOW

To: DEB CHEMICAL PROPRIETARIES LTD., BELPER, DERBYSHIRE

Please send a free sample of SWARFEGA to :—

FIRM'S NAME ....

ADDRESS ....

14 ....

THERE IS A SWARFEGA PACK TO SUIT YOUR PARTICULAR NEED

2½ lb. tins, 1 gall. cans, 28 lb., 56 lb. and 1 cwt. kegs, and 4 cwt. drums. Containers are returnable but not charged.

EFFICIENT ANTI-WASTE DISPENSERS

MINOR MODEL

Capacity 2¼ lb. sufficient to cleanse 300 pairs of hands.

VISIBLE LEVEL MODEL

Perspex container. Holds 5 lb. sufficient to cleanse 600 pairs of hands.

Dry Hands in 30 seconds

with the

Broughton Patent Electrically controlled Hand Dryer

- Does not require any switch to operate
- Saves money—No towel costs or laundry bills
- Hygienic—No risk of infection from soiled towels
- Unobtrusive and of neat appearance
- Ideal for every establishment

HAND DRYERS by **BROUGHTON**

Write for full details

J. BROUGHTON & SON (Engineers) LTD.
INDUSTRIAL SAFETY ENGINEERS
SECURITY WORKS,
FACTORY CENTRE, BIRMINGHAM, 30 *Telephone: KINGS NORTON 3305-6-7*

OVERALLS—SUPPLIED, CLEANED & REPAIRED

* NO CAPITAL OUTLAY *

Yes, they are just a few of the many advantages offered to the many users of the Scottish Clean Overall and Replacement Service. On joining the scheme your staff will be measured to ensure they will be supplied with smart, well-fitting overalls in styles to suit your requirements. To prevent loss or change, every garment is marked with the owner's name or number.

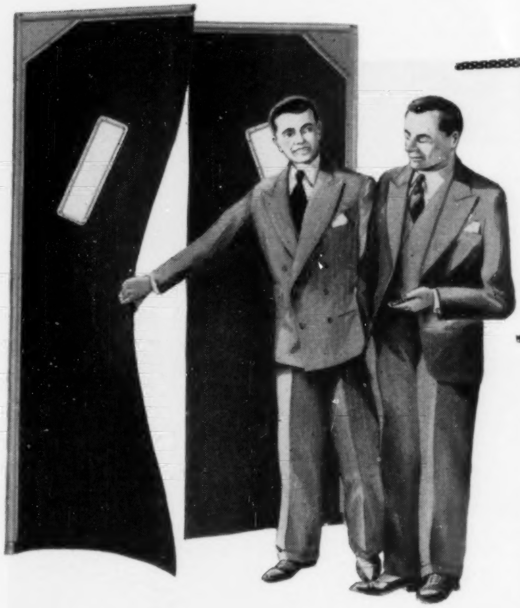
ONLY THE BEST QUALITY OVERALLS ARE SUPPLIED, CLEANED, REPAIRED, COLLECTED AND DELIVERED

With 2 factories and a fleet of vans at our disposal, we are able to provide a prompt and efficient weekly or fortnightly service. From the economic angle, the Scottish Clean Overall and Replacement Service is worth looking into—our prices are most competitive. Write or 'phone for an appointment with our representative, he will give you full comprehensive details.

SCOTTISH DYERS & CLEANERS

(LONDON) LIMITED

ATHLON ROAD, ALPERTON, MIDDLESEX. TELEPHONE: PERIVALE 7802



"No maintenance costs or damage to trucks or loads with **RUBBER DOORS***"*

"As shown on Television Newsreel"

Today the demand for more efficiency is the keynote to greater productivity.

Rubber doors, which have been thoroughly tested, are now being used in many industries.

The cost of installation is more than covered in a very short time, losses caused by damage are eliminated, accidents to personnel are non-existent.

Maximum size for a pair of doors . . .
10 ft. 6 in. high × 9 ft. wide.

Maximum size for single doors . . .
10 ft. 6 in. high × 4 ft. 6 in. wide.

The rubber panels will withstand extremes of temperature.

The doors can be regulated to open one way only or both ways.

Supplied in black and white rubber.

THE BUILDING CENTRE
USE THE CENTRE
26 STORE STREET·W.C.I

Demonstration Doors have been installed at The Building Centre, 26 Store St. London, W.C.I.

Rubber panels by **DUNLOP** *Rubber Co. Ltd.*

For further particulars apply to the manufacturers (Dept. R.D. 10)

WILLIAM NEWMAN & SONS LTD.

HOSPITAL STREET, BIRMINGHAM 19.

Photo: Staff canteen of the National City Bank of New York, London, E.C.2.

"All quiet" in the city

. . . thanks to Acousti-Celotex

Life may be hectic but there's no need for it to be noisy. In fact noise—those unwanted sounds you don't want to hear—can make things hectic just by itself, especially in a busy canteen or games room. Acousti-Celotex, by soaking up unnecessary sound waves reflected from hard surfaces will reduce noise to a comfortable level and so enable you to hear clearly everything that you want to hear. Acousti-Celotex is deservedly popular—it is by far the most widely used sound absorbing material in the world. Quickly installed and unobtrusive, Acousti-Celotex tiles fit in well with any decorative scheme. And you can decorate and redecorate them without loss of sound absorbing efficiency. If you have a sound problem, consult your regional distributor of Acousti-Celotex—they are experienced acoustical engineers.

ACOUSTI-CELOTEX **SOUND ABSORBING TILES**

ANOTHER CELOTEX CANE FIBRE PRODUCT

Distributors for London, Southern Counties, Wales, the Midlands and Yorkshire
HORACE W. CULLUM & CO. LIMITED
8-9 Flowers Mews, London, N.19. Tel: ARC 2662

Distributors for Scotland and Northern Counties
WILLIAM BEARDMORE & COMPANY LTD.
Parkhead Steel Works, Glasgow. Tel: Bridgeton 1881

MADE IN GT. BRITAIN BY CELOTEX LIMITED, N. CIRCULAR RD., STONEBRIDGE PARK, LONDON, N.W.10. TEL: ELGAR 5717 (10 LINES)

ANOTHER COMPLETE INSTALLATION

SHELL

BP

BY Bartlett

Kitchen and Servery Equipment capable of handling up to 400 main meals per day at the Motor Repair Centre, Shell-Mex and B.P. Ltd., Fulham, S.W. May we send one of our Technical Representatives to discuss your problem?

G. F. E. BARTLETT & SON LTD.

BELL STREET, LONDON, N.W. 1. ENGLAND Telephone PADDINGTON 8222 S.B. 65

BIRMINGHAM: 12, Whitmore Road. Tel. Victoria 1615 MANCHESTER: 530, Stretford Road. Tel. Trafford Park 0288

To the RIVER
To the TOWN
To the COUNTRY
To the SEA

Ideas for PARTY OUTINGS by train

Let British Railways arrange the complete outing for you. Special fares for parties of eight or more, facilities include rail, coach, river trips and meals. Fill in the coupon and send to your local Station Master.

POST NOW!

to STATION MASTER, BRITISH RAILWAYS ....

★ Please send me particulars of Party Outings facilities.

★ Please arrange for a representative to call to discuss Party Outings.

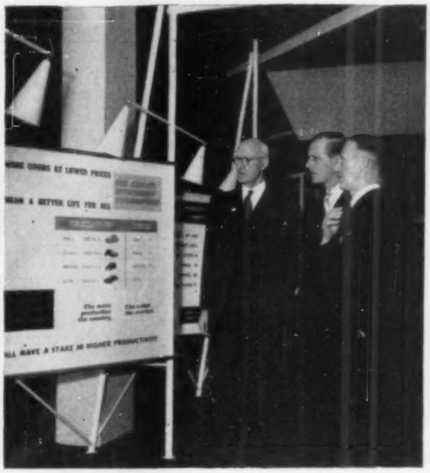
★ (*Cross out line not required*)

MY NAME, ADDRESS AND TELEPHONE No. ....

....

BRITISH RAILWAYS

Over the past two years the work of the British Productivity Council has been steadily developing. Most important are its activities at district level for it is the Council's aim to make its ideas a practical reality on the shop-floor. To this end, firms all over Britain have joined in the work of local productivity committees. This article describes how they work as teams, and sets out some of the results already achieved.



Prince Philip talks with BPC chairman, Mr. Tom Williamson (*right*), and deputy chairman, Sir Ewart Smith, at the "Production For Plenty" Exhibition staged at Olympia in July this year.

How Teamwork Is Leading to Higher Productivity

By ROBERT McKINNON

"COMBINED operations in industry" was the phrase recently used to describe the work of the British Productivity Council (BPC) which has now entered the third year of its existence and can in truth derive real encouragement from its achievement during the previous two. To-day, nearly 100 Local Productivity Committees are operating in all parts of the country, under which more than 500 firms, employing over 500,000 workers, have joined in the activities of the Council and, says a recent *Progress Report*, "more are joining every month". It is, moreover, a body sponsored, supported and part financed by the "top brass" in British industry—The British Employers' Confederation, the Federation of British Industries, the National Union of Manufacturers, the Association of British Chambers of Commerce, the nationalised industries and the Trades Union Congress. For these reasons, then, the Council's work is more and more being regarded as a vital national project which holds out the promise of bigger rewards to all sections of industry.

The BPC is essentially a practical body seeking a practical answer to a practical problem, namely "to stimulate the improvement of productivity in every section of the national economy by every possible means". It represents jointly management and workers from all types of industry and is non-political and free of Government control. As the Council's chairman, Mr. Tom Williamson, C.B.E., J.P. (who is also general secretary of the National Union of General and Municipal Workers), said recently: "Through the Council, for the first time, the whole industrial community can speak with a single voice on matters of common interest."

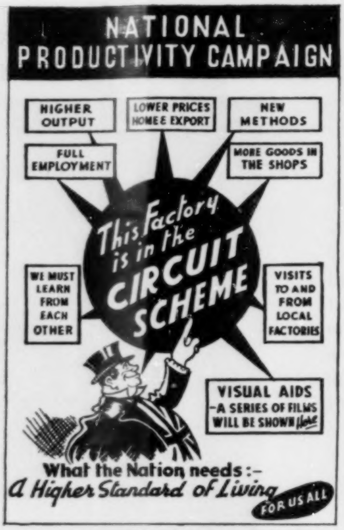
The Council operates in two distinct ways though, in the final analysis, these tie up. First, there is the work of the London Headquarters which, like that of any other Head Office, advises, suggests, collects and collates information and "co-ordinates". Activities here include the publication of productivity reports and bulletins, the production of films to help industry, and maintaining contacts with Government departments and other organisations working in the field of productivity.

Secondly, there is the work of the Local Productivity Committees whose services are voluntary, who act almost entirely from their own initiative and who tackle specific problems in their respective areas. And on their activities depends the success of the BPC. They form the skeleton of the project whose nourishment can only be drawn from the active interest taken by local firms. **For if the Council cannot put across its ideas in such a way that they become a reality on the shop-floor, it would fail in its aim.**

No set composition is laid down for a Local Productivity Committee, the only suggestion being that it should contain a fair number of members drawn from both sides of industry and that, wherever possible, one of them should be a trade unionist. The remainder of the Committee might be drawn from educational or professional bodies which have a close relation with industry.

Local Productivity Committees (LPCs) operate primarily through the Council's "Circuit Scheme" and results to date have been most impressive. A circuit consists of six or eight LPC firms who exchange visits once a month on a home-and-away basis, very much as in a football league. Most teams are made up of six members, two from the management, two from the firm's technical side and two from the shop floor, but small firms can group together if they wish and form a representative team under a carefully selected leader. Large firms, on the other hand, can form more than one team.

As the primary object of such exchange visits is to raise productivity, the Council urge that at least one member of each team should belong to top management and so be in a position to *apply* any new ideas the team may pick up. Preferably, the firms concerned should be drawn from a variety of industries so that the maximum benefit is derived from such visits, though, of course, the Council by no means suggests that details of new products or processes be freely disclosed to competitors. Again, although the idea is to see how the other fellow works, a "Circuit" visit is not a general tour or sightseeing expedition. Members of teams are well briefed before the visit and each concentrates on studying the counterpart of his own job, or the job most like his own. Information collected is collated by a team secretary from notes submitted by the rest of the team and later a report on the visit is distributed to various executives and team members.


NATIONAL PRODUCTIVITY CAMPAIGN
HIGHER OUTPUT
LOWER PRICES HOME & EXPORT
NEW METHODS
FULL EMPLOYMENT
MORE GOODS IN THE SHOPS
This Factory is in the CIRCUIT SCHEME
WE MUST LEARN FROM EACH OTHER
VISITS TO AND FROM LOCAL FACTORIES
VISUAL AIDS -A SERIES OF FILMS WILL BE SHOWN Here
What the Nation needs :-
A Higher Standard of Living
FOR US ALL

A BPC view of what a Circuit Scheme has to offer.

At the same time the scheme remains in essence flexible so that it can be adapted to local needs. Almost any facet of factory life can be studied—e.g., technical processes, handling methods, costing, welfare—but team members ought to have their questions clearly drawn up beforehand under definite headings, and take great care to avoid matters affecting wages and working conditions. Among personnel questions which the Council itself thinks might be profitably investigated are: the induction of new workers, training methods at all levels, communication and joint consultation, accident prevention and incentive and welfare schemes.

Examples of the worth of circuit visits are already almost legion and vary profusely. Some selected at random are as follows:—

1. Three Tyneside firms have decided to modify their planning systems, three are going to improve cleanliness and one its lighting system, and one is to tighten up on wastage of materials.
2. In Watford several firms have adopted the special rubber doors that were seen in a factory they visited.
3. A firm in the Southampton area making synthetic glue visited an aircraft factory, and has as a result considerably improved its own standard of "housekeeping".
4. Resulting from a circuit visit, an LPC in the Hull area has developed a system whereby all member firms receive a list of waste materials currently available in their area.

These are but a fraction of the results which have accrued from the system of circuit visits. At present, moreover, only about 500 firms are taking part in the scheme, whereas the latest Board of Trade returns list some 286,000 companies in Great Britain. What an unparalleled boost to national productivity might result if, say, one quarter of this total were to take part!

Local Forums

Public meetings and discussions are another feature of the work of LPCs. They are staged in order to arouse public interest and have proved particularly useful where contacts made at such meetings are followed up. The programmes vary considerably. At Manchester, Liverpool, Stoke-on-Trent and Birmingham, for example, there were addresses by the economist, Graham Hutton, supported by members of the Council. Burnley held six at fortnightly intervals—each meeting being addressed by an employer and a trade union official—while Kidderminster and Portsmouth arranged meetings at the works of various firms to encourage employees to discuss the Council's work. Guildford ran a series on the techniques of production management, Leicester organised a "brains trust" of trade unionists and employers, and Kilmarnock and Aberdeen held talks on work study. As an example of co-operation with other bodies, Wakefield LPC held a one-day conference with the Industrial Welfare Society and the Institute of Industrial Administration.

Inseparable from the idea of productivity is that of work study. For this reason the Council recently set up a Work Study Unit with special

6 FEATURES OF A CIRCUIT SCHEME

1 *Six to eight firms form a team who exchange visits once a month on a home-and-away basis.*

2 *Each team has six members: two from management, two from the shop-floor and two technical men.*

3 *One member should belong to* ***top*** *management so that any new ideas can be* ***applied****.*

4 *Almost any facet of factory life can be studied, and the more varied the firms in a 'Circuit' the better.*

5 *Care is taken, however, not to investigate or discuss wages and working conditions.*

6 *A 'Circuit' visit is not a sightseeing tour. Members report back to a team secretary who collates their information and ideas for further action.*

financial help from the Government. The object of this unit is not to go into factories and advise on specific problems, but to travel round the country and rouse management's interest in work study, to make them aware of its great possibilities, and to kill the prejudice which exists in some quarters. **The Unit does not enter into the question of wages or conditions of employment, nor does it invade the field of organisations providing full-length courses of instruction or technical advice and guidance to individual firms.** It will, however, advise interested firms on how to set up work study units in their own factories.

The Unit consists of three officers: the senior officer, Mr. H. G. Wood, Mr. R. G. Jones, a former full-time trade union official, and Mr. G. Leighton Peace. They operate through "Work Study Weeks" during which they visit various parts of the country and arrange sessions with the aid of local productivity committees and, where available, with the help of local technical colleges as well. During the intervening weeks, members of the Unit are available for one-day courses, speaking engagements, and follow-up activities in centres where Weeks have already been held and in planning visits to those where they are in prospect. Every means of promoting the idea of work study, from film strip to discussion group, is used. To tie up with this work, the Council has begun a series of seven films on work study and has obtained a grant from EPA towards their cost. These films, says the Council's latest *Progress Report*, "will go some distance towards meeting the very heavy demand for visual material on this subject".

Glasgow Productivity Committee
FIRM STUDIED ASSEMBLY
A BETTER WAY OF DOING THE JOB
THIS FIRM LOOKED AT A MAN AND HIS MACHINE
PRODUCTIVITY HELPS US ALL
WORK STUDY HELPS PRODUCTIVITY

Some practical examples of how local firms have benefited are highlighted at a "Research in Industry" Exhibition recently held in Glasgow.

The Council claims "enormous success" for the Work Study Unit which is fully booked up until the end of June, 1955. A typical instance was the one-day course held on September 21 in Nottingham, where Mr. Wood held a meeting with employers and Mr. Jones with trades union officials. Later, a joint meeting took place where local case studies were discussed. There was also an evening session open to the public which was attended by all sections of local industry and by local M.P.s of both parties. This took the form of an open forum on productivity and work study, the discussion being led from the platform by a trade union and work study unit.

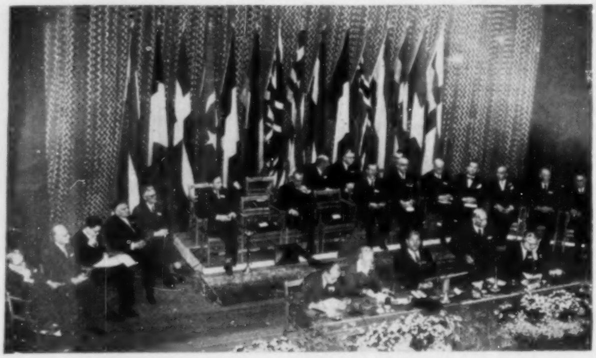
An example of a typical Work Study Week was that held earlier the same month at Portsmouth. One of the most successful sessions was when the work study officer used a film strip to pose a problem, namely, the introduction of works study to boost production and as a step towards improved human relations on the shop floor. A representative of the Trades Council in the audience took the rôle of manager, two managers played the parts of shop steward and operative, and a local Press representative became the work study specialist.

The British Productivity Council point out that there is no similar organisation in any other part of the world and that what they are doing has aroused very keen interest in Europe—especially as they have managed to keep their work practical and down to earth. At the same time they hope to create that *climate of opinion* throughout British industry in which the flow of ideas and knowledge is not frustrated by prejudice and suspicion at any level.

Watford LPC launched their Circuit Scheme with a visit by a team from printing firm, **Hill & Lacey,** to **Sun Printers** plant.

European Nations Exchange Their Management Ideas

The Editor sums up his impressions of the European Management Conference held recently at Torquay. Sponsored by the International Committee for Scientific Management and organised by the B.I.M., the Conference had for its theme "The Contribution of Management to European Prosperity". In an exhaustive agenda, personnel matters — notably education and training for management — figured prominently.



The Conference opens at the Torquay Pavilion. In the background are the massed flags of the nations represented. In the foreground, Sir Hugh Beaver, B.I.M. Council chairman, addresses the delegates. On his right are M. le Comte P. Baruzy, C.I.O.S. European Council president, Dr. Lillian Gilbreth and Col. L. F. Urwick.

THE general feeling among the 1,200 delegates and observers who attended the European Management Conference held at Torquay a few weeks ago was that the event had been a real success. For four days this charming little resort was, as one national newspaper put it, "bulging with brains" as some of the finest practical minds in Europe met to discuss what was going on in the world of management. Twenty-four countries were represented,* three languages (English, French and German) were freely available through simultaneous translation facilities, while the Conference sessions themselves were so many and so varied that it was often a case of "embarras de richesse".

In retrospect, however, it is clear that the Conference owed most of its success to its undertones and sidelights, to the informal, unselfconscious manner in which delegates met and spoke among themselves, and to the B.I.M.'s first-class organisation of the whole event. The complicated mechanics of running a Conference of this size seemed to function without a hitch from the moment the two special trains left London for Torquay and returned four days later. Coaches arrived in time to take delegates from their hotels to the various Conference centres, talks and discussions were held at the appointed time and place, and the translators (ensconced behind cubicles with their microphones) did an excellent job. Oversea delegates were very much impressed and British management has emerged with an enhanced reputation.

A Scientific Epoch

So much for the atmosphere in which Europe's managers met. The Conference matter itself, extending as it did to 32 separate sessions and 29 discussion group circles, defied by its very bulk and variety any search for a central theme. One was left, nevertheless, with the impression that the epoch of "scientific" management has definitely arrived. And this not only because of the nature of the papers presented (e.g., "*Modern Applications of Financial Control*", "*Cutting The Costs Of Clerical Procedures*", etc.) but in the objective, analytical nature of the discussions which followed. It seemed as if delegates were aware that there was a science to help them in their jobs and were carefully probing how best to use it. It was interesting, too, to note how each speaker was peppered with questions immediately the discussion opened, and also the large number of oversea delegates who chose to speak in English.

That one sensed a scientific flavour running through the proceedings is not, however, to suggest that the Conference agenda was remote, over-technical or "dehumanised". Certainly, Mr. Henry Strauss, Parliamentary Secretary to the Board of Trade, who was one of the principal speakers at the closing banquet, made a plea for management to use more simple language and not to bog itself down in a gobbledegook of its own, but this was a matter of words, not of content. The agenda in fact was, if anything, weighted towards the question of the human factor in industry with 10 of the 32 papers and 7 of the 29 discussion group circles dealing with some aspect of personnel management, welfare, communication or education and training for management. A science management may well now be—but the Conference programme made it clear that it is a science with its human as well as its technical imperatives.

---

* *Including representatives from the Commonwealth and other countries abroad.*

The case study given by Dr. E. Mittelsen Scheid, head of a fabrics factory in Wuppertal employing 5,000 workers, serves as an excellent illustration. In the course of his address, which he called "Management Through Co-operation", Dr. Scheid mentioned that he employed no personnel manager as such, this function being part of the duties of each of his department managers, besides which his "own door was always open". There could be no doubting Dr. Scheid's sincerity, but the general opinion of his audience was that no works of this size ought to be without a separate personnel department, if only to attend to such matters as records and wages. There was the conviction among his many questioners that, however enlightened the attitude of himself and his department heads, it was essentially a paternalistic system. And the modern concept of human relations, the "scientific" approach, leaves no place for paternalism.

Welfare Today

Another session of interest to personnel and welfare officers was the discussion group on "The Changing Emphasis In Employee Amenities" chaired by Mr. H. L. Thompson, works manager of the *Imperial Smelting Corporation*. Here, the majority were agreed that workers' amenities had today not so much changed in emphasis as increased in number, that many of the "concessions" of 20 years ago were now provided without question as part and parcel of the job. The progressive employer had gone on to exploit new ways and means of improving human relations —e.g., education and training schemes and pension schemes for hourly-paid workers. The group was almost unanimous, however, in rejecting the idea that incentive and bonus schemes could be considered as amenities.

As a background to such specialised topics were the plenary sessions of the Conference which were intended to give the broad picture of Europe's economy today. At these, the main speakers were M. le Comte P. Baruzy, president of the International Committee for Scientific Management, M. R. E. Marjolin, secretary-general of O.E.E.C., and the celebrated Spanish philosopher, Professor Jose Ortega y Gasset, who spoke on the "Social Background to European Management". M. Marjolin summarised economic trends in various European countries and was cautiously optimistic about immediate prospects. He was in no doubt, however, that a very real recovery had taken place. This was in interesting contrast to Professor Gasset who, for reasons darkly metaphysical, asserted that Europe's production had recovered, but not its economy. An economy was part of a way of life bound up with the customs of a people; industrial production was only part of the structure of European society. Customs were the essential binding force and many of these had lost their validity. Europe was now being held together by a state of alarm, while the nations themselves were withdrawing one from the other into a state of "parochial nationalism". The real task of restoring the social body was not being faced, claimed the Professor; so if international co-operation between industrialists could help in solving this problem, so much the better.

The general mood of the Conference was, nevertheless, one of optimism and, as already mentioned, British management emerged with enhanced prestige. Nor was this merely on account of the excellent way in which the event was organised. More than one delegate from abroad expressed admiration for the way in which British industry kept its outlook practical.

"In our country", a certain delegate told me, "we have beautiful ideas and theories, and we talk about them a lot. But over here you do something about them."

Which is all very gratifying, particularly as we ourselves so often praise the U.S.A. for the same reason.

EDUCATION AND TRAINING
FOR MANAGEMENT

B.I.M. staff prepare a large education chart at the Marine Spa depicting some of the ways in which Britain is tackling the problem of training the managers of the future. European delegates were impressed by our *practical* outlook.

U.S. Management's "Tremendous Growth"

WE are currently on the threshold of another unprecedented era of economic growth which is destined to surpass the technological and managerial accomplishments of the past, predicted Lawrence A. Appley, president of the American Management Association, in its thirty-first annual report. Over the past quarter century, he noted, the nation's output of goods and services and the standard of living of the American people doubled while the population increased but a third. The prime factor, according to Mr. Appley, in this record of high efficiency and economic progress has been the growth and development of management competence and technique.

The American Management Association also has undergone a period of "tremendous growth" during recent years, and now is ten times bigger than it was a decade ago. The association's "rapid rise to pre-eminence in the field of management education is graphic proof", he says, "of the deep-down sincerity of the American manager's desire to do a better job".

During the 1953-54 fiscal year 48,500 executives attended A.M.A. conferences, briefing sessions, seminars, courses and exhibits, compared with 22,000 ten years ago. The association's membership rolls stood at 19,000, a 20 per cent increase over the previous year and almost a three-fold increase in 10 years. The organization has members in nearly 1,500 cities in the United States, and in more than 200 other cities. Every state, every Canadian province, and 47 other countries on six continents are represented.

The A.M.A.'s success is largely due, Mr. Appley concluded, to the willingness of the American businessman "to share his ideas and know-how with his fellows, to talk and write about management policies, methods and techniques. His frankness in discussing his own methods and his ability to accept criticism of them have been a key factor in the dynamic growth of the American economy".

A worker undergoing heat treatment. This is one instance of ways in which the new centre often carries out treatment prescribed by the patient's own doctor.

An eye examination in progress. A nursing sister is on duty throughout the day, while two nurses attend on a shift basis.

This Modern Medical Centre Welcomes Large Numbers

Prevention is the by-word at this luxurious new medical block at the Southall factory of *Batchelors Peas, Ltd.* Employees are thus urged to have even the most minor injuries treated without delay. Included in the comprehensive service rendered by the centre are first-aid and surgery, not to mention chiropody, radiant heat treatment and the like.

By GERALD WARD

A NEW medical block has just been opened to serve the 1,200 employees of the London factory of *Batchelors Peas, Ltd.*, at Southall, Middlesex. Equipped with the newest and most up-to-date medical and surgical equipment, this wing is ready to deal quickly with the variety of demands made upon it, from simple first-aid to surgical treatment. A bold use of colour in the scheme of decoration has created a bright, modern and restful atmosphere in which the patient can relax.

The block comprises doctor's consulting room, main surgery, separate treatment cubicles, chiropody department, heat treatment room and rest room. It is another example of to-day's enlightened approach to welfare problems, for its purpose is mainly preventive. On the principle that several minor cases are better than one major, employees are encouraged to have minor cuts and abrasions treated before they may become infected through neglect. Evidence of success in this direction is given by the fact that in summer the number of cases averages about 70 a day, mostly minor. In winter, owing to colds, etc., the figure is increased.

Another modern development is the carrying-out of treatment prescribed by the employee's own local doctor, thus avoiding the loss of working hours. Radiant heat, for example, is often given on this basis. Care of the feet, too, is encouraged, and there is such a demand for the services of the chiropodist that it is necessary to book appointments in advance.

A trained nursing sister is on duty throughout the day, and two nurses attend on a shift basis. Twice weekly a doctor gives consultations, examines patients and gives advice. The doctor's consulting room is equipped with an examination couch, filing cabinets, easy chair, desk, etc., and a separate locked cupboard for poisons.

The decoration scheme is of pale biscuit panelled walls with turquoise blue doors and window frames, the curtains and upholstery matching exactly in a Regency pattern.

The layout of the new wing is the result of careful planning. The main surgery, for example, faces west with large, high bay window looking on to the garden. Under the windows are double sinks with hot and cold water operated by special surgery taps, flanked by cupboards with *Formica* tops, on which rest the electric sterilizing apparatus, electric heater for kaolin poultices, glass-fronted drug cupboard, etc. A completely equipped trolley in the main surgery allows minor cases to be treated on the spot.

On the south side of the main surgery are two separate curtained-off cubicles with treatment chairs, examination lamps, etc., each equipped with its own trolley. Here too is the chiropody department.

On the north side looking on to the garden, is the heat treatment room with a variety of curative lamps, a couch with *Dunlopillo* mattress, and a treatment chair for sitting cases. Adjoining, is the rest room where employees may lie down in comfort.

Flesh-coloured fluorescent tubes set high provide the main lighting, with individual examination lamps on anglepoise fittings. All departments have oval section electric tubular heaters set low on the walls, with separate portable electric fires as required. Immersion heaters in a 150-gallon tank mounted over the entrance lobby supply the hot water.

4 FEATURES OF THIS CENTRE

1. *The stress is on prevention rather than cure.*
2. *Treatment includes first-aid, limited surgery, heat treatment and chiropody.*
3. *Workers can also be given treatment prescribed by their own doctors. Thus loss of working hours is reduced.*
4. *Special attention has been paid to the use of colour so that the right atmosphere is created.*

Apart from its medical equipment, the most striking feature about the whole of this block is the bold use of colour in the decorations. As an official of the company says: "Patients say that they feel better as soon as they come in!"

The upper part of the walls and the ceiling, including the original beams, are broken white, and all the main walls primrose yellow. The lower part of the walls of the surgery and chiropody department are pale Persian grey, and all cupboard tops are black *Formica*. Doors on to the main surgery are eau-de-nil. The heat treatment room is a cold pale blue with the inside of the door a dull rust.

The porch and the main corridor are in two tints of beige, one pale and the other a deep warm tint, with a white ceiling to the entrance porch. The rubber tiles on the floor pick up the grey/black cupboard motif and the beige colours of the vestibule. The furnishings throughout tone with the colour scheme: the main surgery curtains are of semi-transparent plastic with yellow flowers and green foliage, above net curtains on the lower part of the windows. The colours in the heat treatment room are repeated in the plastic curtains of red and pale grey, and the screens throughout the separate departments are in conformity with the same scheme.

The two treatment cubicles. Each is equipped with treatment chair, examination lamp and trolley. Chiropody is also carried out here.

Avoidable Injuries

ONE-SIXTH of the 28,000 factory accidents occurring every year involves a foot injury, and the average loss of working time for each is seven days. Giving this information at a conference preceding Birmingham's National Foot Safety Week, organised under the auspices of the Birmingham and District Industrial Safety Group, Mr. R. Bramley-Harker, Chief Superintendent of Factory Inspectors (South Midlands), claimed that 60 per cent of such mishaps could be avoided if the workers involved were wearing suitable protective footwear. Mr. Bramley-Harker said that in his division alone there were in one year 9,884 accidents in the 11,735 factories, 1,667 of them involving the feet. In his view, 1,072 of these accidents could have been prevented. To prevent accidents, the prime remedy was to remove the causes. Tidiness, expert handling of transport, and adequate room in the factories could lead to a substantial reduction in the toll, but safety footwear was beyond doubt the primary remedy. He appealed to workers to equip against the possibility of injury and to employers to organise schemes whereby workers could obtain safety boots at their works.

Helping Spastics

EMPLOYERS and workers in nearly 300,000 factories and firms in Britain are helping the National Spastics Society to raise £250,000 for spastic children. Some 180 million Christmas seals in bright, attractive colours to decorate parcels and cards are being distributed by the Society. Factory and office workers and employers will be invited to donate a penny for each seal.

When the National Spastics Society was formed nearly three years ago by a handful of parents, less than 300 children were receiving proper specialized treatment. To-day the Society has 4,500 members in 93 local groups throughout England and Wales, and it works in close co-operation with the Scottish Council for the Welfare of Spastics. It is instituting a £45,000 medical research programme, and plans to open further treatment centres, special schools and welfare centres in the next few months.

How Competitions Help Safety

HOW one of the world's largest chemical factories has reduced its accident rate to a little over one-quarter of what it was 25 years ago was demonstrated to some 450 representatives of all sections of the chemical industry when the fifth Chemical Works Safety Conference visited the Billingham and Wilton-on-Teesside plants of *Imperial Chemical Industries, Ltd.* In his opening talk, Dr. I. J. Faulkner, a works manager at the Billingham factory, outlined two approaches towards greater industrial safety. First, there was the path of more and better safety devices and improved working conditions, and next was the way of impressing on employees the necessity for safer ways of working. Conference delegates were able to see examples of both approaches during their visit.

Competitions had been found one of the most effective means of winning the co-operation of the workers at the factories in accident prevention, one of these being based on awards for long accident-free periods. For this competition, the plant is divided into sections, and for each 77 accident-free days—equal to 200,000 man-hours—£10 is paid into a section's amenity fund, to be spent on works outings or children's treats. A number of the safety devices seen in operation were specifically designed to suit particular processes employed at the plant, but some could be more widely applied to meet various other needs in industry. Safety propaganda is prominently displayed all over the two sites. Taking a number of different forms it follows the theme that safety is the responsibility of each and every individual.

Worker Shareholders

IMPROVEMENTS are being made by the Hull tanning and glove-manufacturing firm of *G. Waddington and Son, Ltd.*, in their co-partnership and profit-sharing scheme. It is the company's intention to build up within a reasonable period of time a nucleus of adult employees having a substantial share in the capital of the firm. The basis of the revised scheme will be that at the end of each financial year a proportion of profits—at least equal to the amount paid to other shareholders—will be set aside and paid as bonuses to employees, who will have the option of taking their individual bonuses either as cash or shares. Should they take cash, this would be half the amount that would have been issued as shares. The balance thus left over would be held by Trustees in a special fund, the dividend from the shares in this fund being distributed to existing shareholders. The firm have already established an employee directorship which, tenable for three years, is filled by ballot.

Dustmen Partake In Profit-Sharing

"LONG EATON (Derbyshire) Urban Council has taken its 23 dustmen into partnership in a salvage-collecting business—and the men are adding up to £2 10s. a week to their weekly wage from the profits", reports the *Birmingham Post*. This was revealed in the annual report of the chief sanitary inspector, Mr. Thomas Walton, who stated that the dustmen's business had a £3,642 turnover last year.

The scheme was started to solve two problems—to make the salvage collection in the town efficient, and to make the job of dustman attractive to a better class of workman. It was found that at the basic wage of £7 6s. 2d. no one wanted the job.

"The men are paid their share when the salvage has been sold and all expenses have been deducted. The Council made a profit of £93 last year. That is not much, but we have a first-class salvage collecting system—and happier dustmen", Mr. Walton said.

The Sales Leader

MR. F. C. HOOPER, managing director of *Schweppes Ltd.*, certainly knows how to make a provocative statement with complete conviction. He told his audience at the recent Summer School of the Institute of Cost and Works Accountants: "The sales manager is almost invariably a promoted salesman; and normally this is a fatal mistake. The good salesman is a genial extrovert, a likeable, acceptable person who believes in his product, who is enthusiastic, fairly simple-minded, and has a one-track mind.

"Most people like that type of man. . . . But it is usually a fatal mistake to appoint a sales manager from the ranks of these men. The sales manager must manage rather than actively sell. He must be a leader whom the people under him will respect. But much more than that, he must be a rare combination: first of all he must be able to read figures like words, as accountants do." (**"Business,"** 11/54.)

Focus On Foremen

HOW to select a good supervisor, get him started on the job and help him to develop all his abilities formed the basis of a special two-day conference on supervision held in New York last month by the American Management Association. Industrial executives from all parts of the United States heard representatives of five large companies describe their methods of supervisory selection, induction and development policies. Sessions combined the advantages of case-history studies with small group discussions.

* * *

Southend's first post-war Civil Defence exercise combining the local authorities and industry was held recently at the works of *E. K. Cole, Ltd.* The *Ekco* fire brigade and civil defence squad participated with the borough services.

A Grand Old Lady Of Industry

In great demand at the recent European Management Conference at Torquay was 76-year-old Dr. Lillian Gilbreth seen here talking to B.I.M. Council chairman, Sir Hugh Beaver. Among other things, Dr. Gilbreth is the mother of 12 children, president of **Gilbreth Incorporated** and continues to lecture all over the world. Also in the picture are (*l. to r.*), Lt.-Col. L. F. Urwick, M. R. E. Marjolin (O.E.E.C. secretary-general) and M. le Comte P. Baruzy (president of the European Council of C.I.O.S.)

Work Study Courses

TO meet the demand of industry for more work study specialists, full-time training courses are to be provided at the Royal Technical College, Glasgow, Loughborough College of Technology and Leicester College of Technology and Commerce. The courses will be of 10—12 weeks duration, and will start in January. They will be additional to those of a similar type already running at the College of Aeronautics Work Study School, Cranfield. Courses will be of a type suitable for persons of 25 to 35 years of age holding junior or mid-executive level posts in industry, trades union officials, education and training officers in industrial firms, and teachers in technical colleges. The tuition fee for the course will be £100, boarding costs, in hostel or lodgings, being additional.

Rescue by Industry

A MOVE to take industry to Malvern is being taken by a Birmingham clothing firm which plans to open a factory in the rseort to provide ultimate employment to 250 women workers. Councillor John Clarke, of Malvern, is at present acting as recruiting officer for the 50 women who will be required initially. The directors of the firm state that the new factory will have a pleasant frontage and be free of smoke and noise. Mr. Clarke informed the Midland Industrial Development Association recently that, unless industry came to the town, the existing population of about 20,000 would be faced with grave unemployment difficulties.

TV for Peace ?

EFFICIENCY experts want double-shift day work and no absenteeism; human beings may want entertainment laid on like running water. Would it be wise to experiment now with "vision while you work"? Should every factory have a retiring room where entertainment could be taken in snacks to spare the worker the trouble of rushing home? On such questions the industrial psycholgists, labour manager consultants, and time and motion experts should already be working. There should be a sub-committee of the T.U.C. For the strikes of the future may be not against overtime but for between-time. **("Daily Telegraph,"** 11/11/54).

Case Studies Progress

THE recent publication by *Newman Neame, Ltd.*, of the 25th in their series of case studies on human relations in industry, marks 18 months of encouraging progress in this important new field of management education. The publishers state that there has been widespread interest in their programme. Cases have been translated and are being studied in a number of countries, and more than 10,000 are now in use in Britain.

From The House Magazines . . .

Industrial Crammer

OWING to inability to recruit from outside the organisation sufficient qualified draughtsmen to meet the increased pressure of work in the drawing office, the idea of a comparatively short scheme of intensive training was conceived early this year. Any attempt to place several trainees into the drawing office would have caused a considerable problem in training to a staff which was already fully committed on production work. The alternative was to provide intensive training which would not only obviate such pressure, but at the same time provide quick and lasting results. A course of training was therefore devised, consisting of six months' intensive training in a school, followed by a further 18 months' experience in the drawing office. It was felt that two years' practical work of this nature, coupled with appropriate technical studies, would fully equip a trainee to take his place in the drawing office. Applications were invited from time-served men with good practical experience, who could show some evidence of technical studies. Eight trainees were selected from 25 applicants. A retired lecturer was engaged as instructor, and the course started on August 23. It is too early to say whether further courses will follow, as these measures are designed to supplement normal apprentice training rather than replace it. Even so, it is intended to extend the principle throughout the organisation. (**Newsletter**—*David Brown, Ltd.*, 11/54.)

Five Years to Learn

Our training programmes have been laid out in detail on a five year basis, and initially five trainees are being trained for specific posts—two for Production Management, two for Production Engineering, and one for Personnel Management. Three of the young men have been selected from within our organisation, and two are newcomers to the company. It is confidently expected that all *Ingranic* folk will give them a welcome and full co-operation. (**Intercom**—*Ingranic Electric Co., Ltd.*, 10/54.)

Popular Appeal

"Prompted by an appeal from 'very lonely and homesick soldiers out in the Canal Zone', letters are on their way to Egypt from three young women employed in Redbourn Works costs department. Up went the appeal on the costs department notice board, and so great was the response from the girls that a ballot was held." (**"Ingot News,"** October, 1954.)

First-Aid Pairs

The number of serious injuries to Africans working at Mufulira mine is very small. One of the reasons for this is the fine work being done by those who man the first-aid and dressing stations on surface and underground. These men usually work in pairs. They go out each day with gangs of surface workers on wood lorries and to the magazine dump, carrying a first-aid box or "snake-bite" outfit in case of accidents. Wherever there is a risk of accident you are sure to find a dresser. (**Mufulira African Star,** 10/54.)

Holiday Club Rules

"WHEN a new Holiday Club is opened a point of immediate practical importance is whether or not it should be affiliated to the National Savings Movement. If the deposits are expected to exceed the normal limits, affiliation is essential, for, without it, an application to the National Debt Office for sanction to exceed the limits, would be very unlikely to meet with success. It will be remembered that affiliation can only be obtained under certain conditions, which are as follows:

1. The Club shall have a Secretary, a Treasurer, and an Auditor. No person shall hold more than one office.
2. The Club shall have its account either with the Post Office Savings Bank or a Trustee Savings Bank, and this account shall only be operated under the signatures of at least two persons, whose names are given to the Bank as being authorised to operate the account. The Auditor shall not be one of these.
3. No member may subscribe more than £52 in any one year or have a balance with the Club of more than £80." (**Ruston News,** 5/11/54.)

Executive Training

Two groups of executive development courses began recently at our Hoboken plant. The first group will deal in policy-making and administrative practices and the second will cover cost and finance. The courses will continue for 15 sessions and a total of 40 men will attend. Both instructors are members of the faculty of the Harvard University Graduate School of Business Administration. (**Lipton News,** 1/10/54.)

One of the latest to join the growing body of house magazines is *Link*, organ of the *Pressed Steel Company Ltd.* Among the features it carries is a regular page by the Works Doctor on some aspect of industrial health.

* * *

Wall's Magazine included an inset questionnaire with a recent issue asking readers a number of questions about their reactions and opinions on the journal, and also if they had any suggestions for improving it.

How to Take the Strain Off the "Human Machine"

By G. McPARTLIN, M.A.,
Senior Technical Officer, Central Council of Physical Recreation.

Numerous injuries, premature retirement and countless working hours lost each year result from bad lifting and handling on the shop floor. This article describes some of the more common mistakes made by workers using "traditional" methods and gives details of a course which sets out to correct these.

WITHIN recent years there are encouraging signs that one of industry's serious problems—that of getting workers to use correct methods of lifting and handling—is being tackled successfully, as a result of the course being run by the Industrial Welfare Society in conjunction with the Central Council of Physical Recreation. Even so, there are still too many firms who show no interest whatever in this most important matter, so I shall begin by describing the problem in general terms.

While it is true that mechanical handling has taken a lot of the heavy labour out of industrial processes, many lifting and handling jobs still have to be done by hand. And the injuries caused by the incorrect use of the human "machine" cost industry thousands of working hours every year. No less serious are the insidious, cumulative strains on workers as they get older which often force them to give up work much earlier than they need have done. This problem is, nevertheless, a difficult one to tackle because it is hard to demonstrate to a worker used to "traditional methods" that these are wrong. Again, the young worker—especially the young man—so rejoices in his physical strength that he may well take delight in getting his result by sheer brute force, forgetting that, when a process has to be repeated many times every day over a number of years, the more economically it can be done, the better.

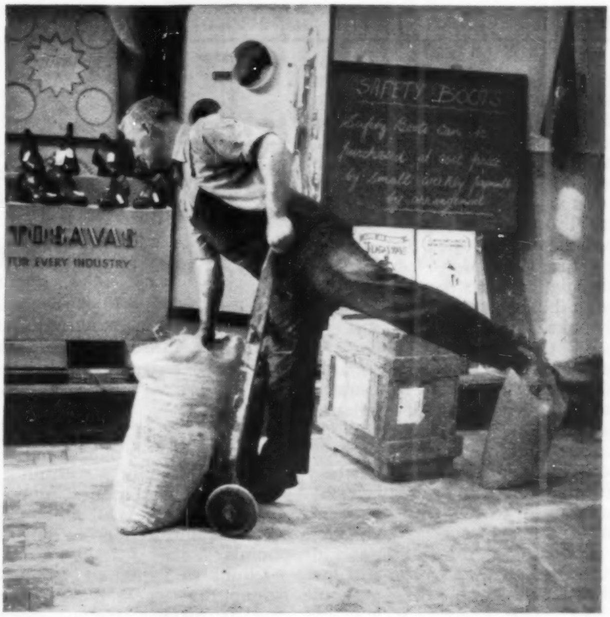
Many attempts have been made to tackle this problem with varying degrees of success. During the War, in the Services and ordnance factories, the problem was made more acute by the fact that many women were asked to perform heavy manual tasks for which hitherto they had been considered physically unsuited. Many muscular and other injuries were the inevitable sequel, but the incidence of strains and injury was considerably reduced when special training was given. In the Services too—especially in gun crews—training in the correct and efficient handling of heavy objects received high priority. Sometimes the results were spectacular.

As a result of common mistakes in lifting, most workers concerned develop bad muscular posture both at work and play which gives rise to a whole host of aches and pains and, in many cases, eventual muscular disabilities—low back pain, rheumatism, neuritis, and the like. Often, too, injuries arise through the worker losing control of the object he is handling, sometimes with serious and, indeed, fatal results. The more common errors are:—

1. Insecure starting position involving lack of bodily balance.
2. Incorrect grip.
3. Putting the strain on the wrong muscle groups.

6 Features of Lifting Without Tears

1. *STARTING POSITION. Should be secure and well-balanced, thus correct use of feet is important.*
2. *HAND HOLD. The grasp should be with the whole hand—never with the finger tips.*
3. *STRAIGHT BACK. A bent back increases the strain on the spine.*
4. *HEAD POSITION. The chin should be pulled well in to create a "lock action".*
5. *ARMS. Should be as near the body and as straight as possible.*
6. *BODY WEIGHT. Is very important when moving objects from one position to another.*



How to load a heavy sack on to a trolley. Note how the right arm and leg are kept straight and the use being made of the body weight.

4. Failure to compensate for a narrow movement in a restricted range by a movement stretching the muscle in the full range.

5. Unsuitable clothing and footwear.

6. Badly designed aids to lifting and handling.

Industry as a whole has remained indifferent because those who are in a position to help have hitherto found it difficult to get their ideas across in a way which the worker could understand. In 1950, however, the Industrial Welfare Society, in co-operation with the Central Council of Physical Recreation, called a conference in London attended by representatives of some 100 firms. T. McClurg Anderson, consultant to the *I.C.I.* at Ardeer on manual lifting and handling problems, and George Hickling of the C.C.P.R., who had had a great deal of experience in industry, led discussions and gave demonstrations. The conference was a great success and this encouraged the two bodies to co-operate further in running one-day training courses in industrial centres throughout Great Britain. Mr. McClurg Anderson prepared a special handbook on lifting and handling which forms the basis of these courses, and Mr. Hickling has conducted each course.

As a result, certain industries, notably the *I.C.I.*, *British Electricity Authority*, *British Oil and Cake Mills*, have asked for special surveys to be made on their own problems and for key men and women in their factories to be trained in correct methods. *Messrs. Vauxhall Motors* have gone a stage further by inaugurating a training department within their factory and, at Ardeer, in Scotland, under the guidance of Mr. Anderson, *I.C.I.* have a special staff including trained physiotherapists to ensure that everyone in the factory is trained on the right lines. Results so far have been encouraging and in some cases dramatic.

The basic principles are few although, in the case of specific industrial processes, it takes an expert to analyse the movements and advise on the correct method. The principles might be summarised as follows:—

1. *Starting position*—must be such that the position is secure and conducive to good balance. In this connection, the correct use of the feet is important.

2. *Hand hold*—an uncomfortable or insecure hold causes excessive tension in all the muscles of the body and encourages the tendency to bend over the job. The grasp should be with the whole hand—never with the finger tips.

3. *Straight back*—a bent back leads to excessive tension, increases the strain on the spine and the risk of injury.

4. *Position of the head*—this is related to the straight back and can be simply described as keeping the chin in. Mr. Anderson regards this as one of the key positions and describes the pulling in of the chin as a "lock action".

5. *Position of the arms*—the further the elbows and arms move away from the sides, the greater the load placed on the arms, shoulders and back. When lifting or carrying, arms should be as near to the body and as straight as possible.

6. *Use of body weight*—this is of vital importance when objects are to be moved from one position to another—pushing and pulling with the arms without bringing the full weight of the body to bear on the effort is wasteful of energy and is frankly dangerous.

Much of the success of recent efforts has been due to the personality and efficiency of Mr. George Hickling. His wide industrial experience, married to his extensive knowledge of physical training principles, has enabled him not only to demonstrate principles in a general way, but to illustrate their application by dealing with specific industrial problems. Workers are notoriously suspicious of visiting experts, and on many occasions Mr. Hickling in the early days was confronted with a sceptical, if not actually hostile, audience and was frequently asked to tackle a particularly sticky job almost, one suspects, in the hope that he would make a "botch" of it. These occasions have usually provided Mr. Hickling with the opportunity of making the most dramatic mass conversions to the new principles.

Both the I.W.S. and the C.C.P.R. feel that the case for training in correct methods has been proved. New entrants to industry should be taught sound methods from the word "go"—established workers should be given the opportunity to revise their methods before cumulative strains and the inevitable aches, pains and avoidable accidents happen. So far only a proportion of Britain's industry has benefited. The problem now is to get the idea across on a truly national basis.

Management Through The Supervisor's Eyes

Running Suggestion Schemes Is a Matter of Tact

As is made clear by the letters which appear in this article, running a Suggestion Scheme successfully calls for much tact and understanding. If an idea has to be turned down, the worker concerned should be told exactly why and at the same time encouraged to send in more ideas. Most firms who remember these small but important points have found that such schemes are definitely worth while.

THE subject of Suggestion Schemes raised by a reader in the October issue of this journal has aroused a great deal of interest, judging by the letters I have since received. If you remember, a supervisor was worried because one of his workers thought the supervisor had advised the Suggestions Committee against his suggestion for a new assembly jig from motives of jealousy. Nothing the supervisor could say would make him change his mind. I suggested that a possible line of approach to help dispel this man's attitude of suspicion would be to make the gadget and let the man try it out for himself.

The case has obviously interested another supervisor for he writes: "Curiously enough I had a somewhat similar problem to deal with about six months ago. I had been trying to boost production in my section and in particular had stressed to some of the men that I liked them to think about their jobs. One process is done by four men. They tackled me one day and suggested a different way of doing it." My correspondent then goes on to say that, although he did not think the new method was any improvement over the old, he agreed that the new method should be tried, so that the men would see he was genuine in wanting suggestions. The result was that production has remained much the same, but the men say they prefer the new method and have stuck to it.

Mr. R. A. Walton, of Widnes, Lancs., suggests a method "that will go further in retaining the man's goodwill—and will cost far less in time and wasted materials than putting his ideas into practice experimentally in order to prove that they will not work". This method allows for a "personally-typed rejection note, signed by some high-level executive", explaining why the suggestion cannot be adopted. The note should "make a special point of inviting the worker to submit further suggestions as it is his constructive and thoughtful attitude towards his job which the firm appreciate".

Mr. Noel S. Jordan, of Bramhall, Cheshire, also points out that in some cases the waste of material involved would make it impossible to construct a jig. He says: "What chaos can be imagined with supervisors able to use perhaps expensive material and other departments' facilities making useless jigs? How many organisations allow jigs to be made willy-nilly without some authority higher than a supervisor's? Are you aware that a jig can cost hundreds and sometimes thousands of pounds?"

I think we would all agree with Mr. Jordan that where the expense is as great as this, it would rule this way of tackling the problem out of court. It must always be a matter for judgment in each individual case to what extent material (or productive time in the case quoted by our first correspondent) should be wasted in an attempt to overcome human problems. Mr. Jordan goes on to suggest a course of action which would bring the group into the picture. He says: "The Supervisor should raise the matter again either in the canteen or at a social, preferably in the company of the latter's pals, who will presumably be technically minded enough to appreciate the snag found by the supervisor and josh the man out of his resentment."

We have already discussed the power of a group to influence events, and I am grateful to Mr. Jordan for reminding us that this technique can be as useful in dealing with suggestion box problems as with others.

NO EASY TASK

MANY firms have found that the administration of suggestion schemes is far from easy, but most of them would say that the schemes are nevertheless worth the time and trouble involved. How some of these troubles can be avoided is outlined in a very useful little pamphlet published by the Industrial Welfare Society, entitled "Suggestion Schemes". This booklet gives practical advice on how to start a scheme, the constitution of the committee, the continued administration of the scheme and the scale of awards. Can we have some more letters on this very important subject? Do you find that suggestion schemes improve efficiency and/or human relations in your concern?

We might discuss, too, the power a group has to influence the thoughts and actions of one of its members in another very topical context—the unofficial strike. I know many supervisors feel that a strike situation puts them in a very awkward position and one moreover in which they feel helpless to influence the trend of events. Two incidents which occurred while such strikes were in progress illustrate this feeling. One man obeyed the official ruling of his Union and went on working although the rest of his group was on strike. When it was all over and everyone was back at work, there was so much ill feeling in the department towards this man that he had to be moved. The supervisor could see no way of influencing the situation and lost an efficient worker.

In the second case, I have in mind the supervisor who also lost one of his best workers. This man came to the supervisor and asked for his cards. "I have a wife and children to support and I cannot afford to be on strike", he said. "I can find you a job to do" the supervisor suggested. "Oh no", the man replied, "I don't want to go against the others." He left the company instead. Placed in a similar situation to this man most of us give our first loyalty to the small group to which we feel we belong most closely. We desire first the approval of this group. We are prepared to risk the disapproval of other people in order to keep in with our own group. To win back some of this loyalty, is one of modern management's major tasks. Is the supervisor but a pawn in this larger game or do you think he has the power and opportunity to play a more positive rôle?

I was talking to your Editor about the European Management Conference which took place recently at Torquay. He told me that one of the most interesting discussion groups he attended was on the subject of welfare. Apparently all present were agreed that the emphasis today was more on training and social security measures and much less on such facilities as sports grounds and "Music While You Work". Have you noticed the same trend? Incidentally did you notice the formula for a personnel manager given by Mr. Geddes at the annual conference of the I.P.M. reported in the last issue of this journal?

"The patience of Job; the sympathy which passeth all understanding; the subtle cunning of the trained diplomat; the analytical brain of the scientist; the bargaining persistence of a Shylock."

Could it not apply equally well to supervisors?

DISCUSSION LEADER

Suggestions For Suggestions

Discussion Leader *invites readers to send in their ideas on how a Suggestion Scheme should be run. Views on how to avoid unpleasant recrimination would be specially welcome. Letters may be of any length and, as usual, a guinea will be paid for each one published.*

How One Factory Invokes Ideas

A VERY successful Suggestion Scheme has been operated at *Remington Rand Limited*, Hillington, Glasgow, over the past two years. Based on a "Suggestion Day", the scheme proved so successful that it spread to the Typewriter Division from the Shaver Division where it originally started. One recent "Suggestion Day" resulted in 95 employees handing in ideas for improvements in production methods, while during the past month 15 employees in the Typewriter Division have received awards varying from £2 to £11.

How to Keep the Shop-Floor Clean and *Safe*

By W. M. HALLIDAY

Dirty, oily shop-floors, apart from being unsightly and wasteful, are a constant source of danger in the factory. The condition, however, is by no means unavoidable and can quite easily be remedied by the measures described in this article. These measures, stresses the writer, are relatively simple and cheap.

FLOORS which have become heavily impregnated or saturated with lubricating-oils, greases, cutting compounds, soap residues and similar oily substances, are still, unfortunately, a too common feature in many works and factories. And in many cases the condition is often regrettably regarded as a normal, indeed an unavoidable, concomitant of machine operations.

Even when present on a minor scale this condition is always a great nuisance for workers on machines. In its more persistent and aggravated forms it may also represent a serious wastage of valuable lubricating media, and nearly always results in the severe and rapid deterioration of surface materials on affected floors. The worst feature, however, and one frequently overlooked, relates to the considerable accident hazards which may be involved. Relatively small quantities of oil, etc., soaked into the floor surface will quickly produce a greasy and very slippery and dangerous surface.

If for no other reason than that of reducing or eliminating such accident risks, proper steps should always be taken to prevent the oil-impregnation of floors; or where it has occurred through neglect, to adopt special measures to correct the condition by removing the oil impregnant. The means to be employed to achieve the first of these objectives will usually be relatively simple, inexpensive and easy to apply, since the chief causes of the condition are not hard to determine and can, in fact, be easily controlled. For example:—

The moving parts of most machines require regular lubrication at innumerable points. With most modern type machines, and practically all old machines, a considerable quantity of oil will have to be applied manually, thus it often happens that an excessive amount may be directed to certain points. In addition to such excess applications, a certain amount of oil will normally escape along shafts, through bearings, off gears, chains and similar moving parts. This will generally drip constantly and be absorbed into the floor, especially where this is covered with ordinary floor boardings, as is often the case.

Three Methods

There are various ways of preventing such excess oil from even contacting the floor surface. Shallow metallic trays may be interposed underneath the machine bed to collect oil drips. Alternatively, the machine may be mounted upon a foundation base whose level is slightly below that of the general works floor. A third method comprises coating the floor underneath and around a machine with some oil-resistant compound; this will give

7 HINTS FOR CLEAN SHOP-FLOORS

1. *Put metallic trays under the machine bed to collect oil drips, or*
2. *Mount machines on a foundation slightly below the level of the shop-floor, or*
3. *Coat the surrounding floor with an oil resistant compound.*
4. *Screen machines with anti-splash guards.*
5. *Clean floors already impregnated with a strong alkali solution.*
6. *Then apply a thin layer of hot pitch over the cleaned surface.*
7. *In very difficult cases, clean by means of a solvent fluid such as petrol or benzine.*

useful protection providing regular attention is bestowed upon the removal of all oil accumulations at least once per day. This may be easily done by mixing dry sawdust with the pools of oil and sweeping away after a few minutes' soaking.

Measures of this simple and inexpensive kind will usually take care of leaking lubricating oils occurring with machines. If the latter, however, are engaged upon metal cutting operations, considerable quantities of cutting compound will normally be employed. This has to be in a fluid condition, and generally consists of a soluble oil, suspended in water, its purpose being to maintain the cutting tools and workpieces in the coolest state to ensure maximum cutting efficiency, high-quality surface finish on work, and longest working life to tools. Such coolant fluid will be pumped in copious quantity on to the cutters or the work, either of which may be revolving or reciprocating at high speed. Thus streams of coolant fluid may be swirled off such moving members to flow over the machine-frame and on to the adjacent floor surfaces.

To restrict its onset, machines should be adequately screened with sheet-metal or plastic guards. Most makers of modern machinery and plant supply such anti-splash guards as a matter of course; or would do so at the customer's request. In actual practice, however, the proper and systematic use of such protective devices is very often neglected by machine operators, etc.

The remedial treatment for these conditions is perfectly obvious. By ensuring that properly designed screens are available for every machine using such coolant supplies, and that they are maintained in sound working condition and rigorously applied to machines, much can be done to prevent floors from becoming saturated with such fluids. The provision of adequate screens of this kind will also be comparatively easy and inexpensive.

The removal of oil from a floor which has suffered extensive or prolonged impregnation is more troublesome especially with wooden floors, or those having a surface facing of thin wooden boards, or thick rectangular wooden blocks. Floors so impregnated can, however, be partially cleaned so as to be relatively dry, non-slippery and *safe* by the application of some strong alkali solution such as caustic-soda, potash, etc. Where it is impossible to arrest or eliminate the oil leakage from some machine, such alkali treatment may have to be regularly repeated. If the floor is of thick wooden beams or blocks and has become very heavily saturated, two or three successive treatments with alkali may be necessary to remove all absorbed oils.

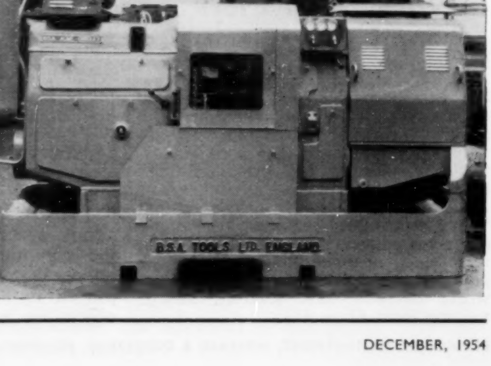
Such an alkali solution should be applied hot, i.e., between 140 to 180°F., and should be mixed into a fluid consistency for easiest application. It should be liberally swilled over the affected floor surface by means of a soft brush or cloth-mop, and then left from 12 to 24 hours in order to allow for its complete reaction with the oil impregnant, depending upon the degree of oil-absorption which has previously occurred with the floor.

The alkali will form a soap by combining with the vegetable and animal oils and fats contained in the lubricant. This soap will accumulate on the floor surface and has later to be removed. This is performed very simply by washing the floor thoroughly with cold water and a stiff brush. The floor is then allowed to dry out under the normal heat of the works building.

This treatment, while capable of removing much of the oil content soaked into a floor, does not ensure complete extraction since alkalis do not react with mineral-base oils. In addition, while the treatment speedily removes vegetable or animal fats and oils, it is not a permanent cure against further impregnation because the treatment has no effect upon the permeability of a wooden or cement floor. Hence the need for repeated treatments, or the application of another treatment which does diminish the permeability of the floor surface.

A very effective way in which this latter may be accomplished is to apply a thin layer of hot pitch over the cleaned floor surface. This coating material is best applied by a stiff brush, and afterwards ironed to an even thickness and close consistency by means of a heated metal roller, or a hot iron plate to which a handle has been conveniently attached. This final pitch-coating treatment will prove particularly useful and economical, despite its initial cost, in cases where mineral-base oils have been saturated into the floor and remain therein after treatment by hot alkalis. Once such a pitch coating has been properly ironed and set hard, it will be relatively impervious to any kind of oil. Thus any mineral-base oils remaining in

(*Continued on page* 304)



A most effective type of splash guard is this one developed by **B.S.A. Ltd.** for use on one of their own machines. (*Picture supplied through the courtesy of* ***J. Broughton & Son Ltd.,*** *Birmingham.*)

The History Of Unilever

Paternalism To 'Partnership'

AS controller of the working lives of many hundreds of employees, W. H. Lever showed all the characteristics of the paternalistic despot. At times he was the complete autocrat :

"I have always viewed you," he wrote to a secretary who had dared to advise him about the conduct of a meeting, "as thoroughly alive to what is correct and proper for a secretary to take upon himself. I am always glad to have your free expression of opinion on all matters that I may discuss with you. But until I do discuss a matter with you, I think that you will agree with me that it is not within your province to lay your views before me. I hope that this will be the last time on which you will venture an expression of opinion as to what course I should take at a meeting unless in response to a request from myself that you should do so."*

In his early years Lever had grave suspicions of the value to his concern of university trained recruits. His nephew, J. L. Tillotson, brought on to the board of Lever Brothers, in 1899, managed to overcome these suspicions. Lever did listen to the proposals and advice of his board, but as chief risk bearer (for many years he held the whole of the ordinary share capital) he insisted on having the final say.

In a paper read to the Royal Society of Arts in 1918 (by this time he had become Lord Leverhulme) he asserted that

". . . no employer-capitalist . . . can be quite happy in the fullest sense in the enjoyment of wealth (the product of his own hard work, intelligence, self-denial and thrift, every penny earned without committing injury to any man, and the acquisition of which has resulted in enormous benefits to his employee workmen) without a strong sense of dissatisfaction with present industrial conditions and a strong desire to improve them so that the employee-workmen may be raised to a much higher level in social well-being."

Out of this sense of dissatisfaction emerged the idea of "prosperity sharing" Lever's alternative to profit sharing. Charity in industry was to Lever's way of thinking an insult to the working man. He detested the "benevolent, philanthropic employer who carries his business on in a loose, lax manner, showing 'kindness' to his employees." He, therefore, turned to the consideration of an orderly system for the more just division of the fruits of industry.

With housing reform at the front of his mind, Lever developed the idea of a model factory village at Port Sunlight, where, thanks to foresight amounting to genius, he had acquired many acres more than he immediately needed.

He said of the scheme in 1903, "If I were to follow the usual mode of profit-sharing I would send my workmen and work girls to the cash office at the end of the year and say to them: 'You are going to receive £8 each ; you have earned this money ; it belongs to you. Take it and make whatever use you like of your money.' Instead of that I told them: '£8 is an amount which is soon spent, and it will not do you much good if you send it down your throats in the form of bottles of whisky, bags of sweets, or fat geese for Christmas. On the other hand, if you leave this money with me, I shall use it to provide for you everything which makes life pleasant—viz., nice houses, comfortable homes and healthy recreation. Besides, I am disposed to allow profit sharing under no other than that form.' "

The atmosphere of heavy Victorian paternalism created by comments such as this was immanent at Port Sunlight. Tenants' front gardens were controlled by the central management and at the weekly dances in the winter girls over eighteen "might submit the names of men to the social department, which issues invitations to them unless there be reasons that militate against them." It was all done with the best will in the world, but even his ardent admirer Angus Watson had to say "the whole village was dominated by the spirit of soap."

Recent trends in Unilever's staff relations and labour welfare policy have been away from paternalism towards a larger measure of voluntary partnership between management and labour, and a larger share of democratic responsibility for labour.

The History of Unilever reflects, among many other things, the changing conception of the responsibilities of management and the social relationships of business.

---

*The History of Unilever. (Published in two volumes.) By Charles Wilson. (*Cassell*, 45*s*.)

Britannica Selling More to Ambitious

CHANGES in purchasing power and interests of the British public are clearly shown by an analysis of a typical cross-section of the subscribers to *Encyclopaedia Britannica's* "Ten Year Programme" over a period of twelve months.

Before the war *Britannica* was acquired mainly by professional men and women, people of independent means, schools and libraries. Sets were presented to retiring directors and managers. Today, 37.25 per cent of the subscribers are operatives in the engineering, textile, building, distributive, transport and printing trades, clerks, secretaries, shorthand typists, ordinary serving ranks, policemen, domestic servants, salesmen and others "anxious to get on in the world".

The professional, managerial, company director, business owner type of subscriber now accounts for only 51.05 per cent of the total. The balance of 11.7 per cent comprises agricultural subscribers, housewives and students. The complete breakdown of occupations of Britannica subscribers is as follows:

Operatives (*engineering, textile, building, distributive, printing, etc., trades, transport workers, etc.*), 23.65; *Professional* (*civil servants, engineers, medical practitioners, dentists, chemists, opticians, accountants, surveyors, ministers, journalists, architects, solicitors, etc.*), 17.55; *company directors, business owners*, 14.9; *clerks, secretaries, shorthand typists*, 9.6; *agricultural* (*farmers and farm workers*), 6.9; *managers* (*business, shop, industrial, personnel, etc.*), 5.7; *teachers*, 5.6; *housewives*, 4.0; *independent means*, 3.9; *serving officers*, 3.4; *sales representatives*, 2.0; *ordinary ranks* (*services and police*), 2.0; *students*, 0.8.

Health in Industry

Industrial Medicine and Hygiene. *Edited by Dr. E. R. A. Merewether. Published by Butterworths, £9 9s. per set of three volumes.*

EMBRACING every branch of industrial and occupational medicine, the three volumes comprising this set form completely separate entities. The first embodies the legislative and statistical aspects; organisation and operation of industrial medical and nursing services; medical aspects of coal-mining, shops and offices and inland transport ; and includes sections on the young worker and canteen services in industry.

Volume II takes in sections on occupational diseases of the skin and eye, occupational psychology, work with compressed air, compressed air illness and its prevention, electrical accidents, explosives, heating and ventilation, lighting, glare and efficiency, intense sound and ultra-sound, effects of ionizing radiations and protection against them. The final work in this set is devoted solely to silicosis and other fibrotic pneumoconioses, pneumoconiosis without fibrosis, and toxicology.

Intended both for reference and as a guide for developing preventive industrial health services, this work provides the answer to all those problems which industrial health and welfare can raise.

Fire Protection Year Book, 1955 (15th Edition.) *Edited by G. F. D. Pratt. Published by Benn Bros., Ltd., price 12s. 6d.*

AS in previous editions, the subject matter of this volume is divided into eight comprehensive sections dealing with all phases of fire protection and services. It includes sections on civil defence authorities, Government departments and public bodies, associations and societies which are connected with fire fighting or prevention.

I.C.I. Personnel Chief Retires

MR. MAX WOOSNAM, personnel manager of *I.C.I.* head office and regions, retired recently after 31 years' service with the company. In 1923, Mr. Woosnam joined *Brunner, Mond and Co.* at Northwich as welfare and employment manager, later becoming labour manager to the *Alkali* Group after the companies merged. He was appointed to the Group board as labour manager in 1929, remaining in this post for the next ten years. In 1940, after just over a year as personnel director of General Chemicals Division, he joined the *I.C.I.* personnel director's staff in London, being promoted to personnel manager in January, 1946. Mr. Woosnam has a particularly distinguished record in the field of sport. Whilst at Cambridge he won blues for football, golf and tennis (in which he also won international awards). He captained Manchester City F.C. as an amateur for three years, and enjoyed the almost unique honour of captaining the professional English International team in 1922.

Succeeding Mr. Woosnam to this important post is **MR. C. WILSON,** a former member of the company's Central Staff Department.

APPOINTMENTS

SIR LEONARD LORD, chairman and managing director of the British Motor Corporation, has been elected vice-president of the Institution of Production Engineers.

SIR HARRY PILKINGTON, president of the Federation of British Industries, has been elected president of the Council of European Industrial Federations in succession to **M. GEORGES VILLIERS** who has held office since the Council's inception in 1950.

MR. W. O. CAMPBELL ADAMSON, personnel superintendent, *Steel Company of Wales* Steel Division, has been appointed assistant general manager of the Redbourn section of *Richard Thomas and Baldwins, Ltd.*

Her Infinite Variety

THREE EXAMPLES

THREE types of married women come to work in factories, Mr. J. M. Bridges, personnel manager, *T. Wall and Sons, Ltd.*, told a recent gathering of the Association of the Dry Cleaning and Garment Dyeing Trades. First, he said, there were those driven to work because of economic necessity. Second, there were the women who did not need to go out to work, but who did so in order to buy extras for themselves or their families. That class of worker put a ceiling on earnings, and was not greatly interested in incentive bonuses or overtime. Finally, there was the woman whose family had grown up and who went to work mainly to avoid boredom. It was important to remember (reports the *Dry Cleaning and Dyeing Journal*) that a woman's loyalty was first to home and family; industry only got her surplus energy. In general, the unmarried woman was much more reliable than the married woman, from the point of view of output, attendance and responsibility for the job. Given good working conditions, proper training and a fair wage, women workers did not ask any different treatment from men as regards welfare.

More Work for Aged—

QUESTIONED in the House of Commons on the retention of the older worker beyond normal retiring age, the Parliamentary Secretary to the Minister of Labour and National Service (Mr. Harold Watkinson) said that everything possible was being done to encourage the review of present arrangements wherever necessary to enable older workers to remain at work, so long as work was available and they could give effective service, though rules could not be imposed on the matter. This policy, recommended by the Committee on the Employment of Older Men and Women, had been approved by industrial organisations generally and as a result there was a slow but steady increase in the number of jobs available for older men and women.

—and for Blind

REFERRING to the placing of blind persons in industry and commerce during 1953-54, the annual report of the Royal National Institute for the Blind says that in the year under review, 291 placements and 100 replacements of trained blind men and women were made, the total being a record for one year in the history of the Institute which specialises in this work. These workers, states the report, are proving their value in open competition with the sighted, and more and more employers are turning to this hitherto untapped source of manpower. The Institute caters for 100,000 blind people of all ages in the United Kingdom, providing nursery schools, grammar schools, vocational training and rehabilitation centres, homes for the aged and establishments for the deaf and blind.

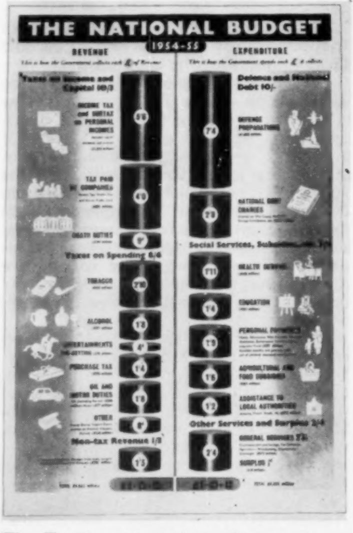
Pensions for 10,000

TEN thousand employees of *Leyland Motors, Ltd.*, ultimately stand to benefit from the company's newly introduced pension and life assurance scheme, which it is hoped will begin to operate in January and will apply to all hourly-paid employees between 21—64 for men, and 21—59 for women, subject to a qualifying period of service of at least two years. The cost of the scheme is being borne by the company, but employees wishing to increase the pension provided can do so by making a voluntary weekly contribution. A contributory pension scheme has been operated at *Leyland* for the past 20 years, but this has been restricted to members of the staff.

High Cost of Smoking

GUILTY Chimneys is the expressive title of the Gas Council's latest film-making endeavour, which received its pre-view in London recently. The tragedy of the pall of polluted air which envelopes and threatens the very life of the nation's urban areas is brought home all too starkly in this revealing production. The second film featured was *Family Album.* Brilliantly conceived, this is the Council's first live-action film in Technicolor, taking the form of a human commentary on the history of gas application in this country.

Official 'Communication'



The Treasury is anxious that as many firms as possible display this poster which sets out in easily understood symbols how the nation's balance sheet is worked out. The poster, which is in three colours and measures 15 in. by 10 in., can be obtained free from Circulation (E), Central Office of Information, 83, Baker Street, London, W.1.

EQUIPPING THE CANTEEN—2

Kitchen Essentials for the Medium Canteen

By L. BANHAM, A.M.H.C.I., A.R.San.I.

This article, the second of a series of three, deals with the equipment needed in the kitchen of a canteen catering for about 250 workers. It lists basic essentials and can also be taken as a working guide for establishments serving roughly between 200 and 300 people.

WHEN planning a new canteen or improvements to an existing one, whatever the size, smoothness of the flow of work is the main consideration. A start should be made at the point where the food enters the canteen as "goods received" and a check made through the processes until it is served to the customer; then retrace by way of the washing-up department to the swill bins. We can begin, then, with the store room.

In all canteens this should be kept clean and vermin-proof, and be well-lit and cool. For a canteen catering for 250 people or thereabout, the refrigerator (which should be housed in the store) should have a capacity of at least 75 cubic feet. Elsewhere in the store, I recommend slatted shelving with slats 2 in. wide and 1½ in. clearance between each. As no food should be allowed to stand upon the floor, duck-boards should be used where necessary to support boxes, crates and the like, and to make for better ventilation and cleaning. A separate and smaller store is needed for vegetables, and here again slatted shelving and duck-boards should be used. There ought also to be a lock-up store for cutlery and crockery replacements and for cleaning materials.

Foremost among the labour savers in the kitchen is the electric mixer. The sizes are calculated in quart capacity of the bowls, and for 250 main meals the 20-quart size should be adequate. There is not much point in buying a mixer without also buying some of the attachments which perform a variety of tasks including mincing, shredding, slicing and crumbing. To make full use of the machine is to get full value for the initial outlay.

A slicing machine may not be a necessity but, properly used, it saves not only labour but food costs too. It is a good canteen cook indeed who can compete with the efficiency of the electrically operated, gravity-feed slicer.

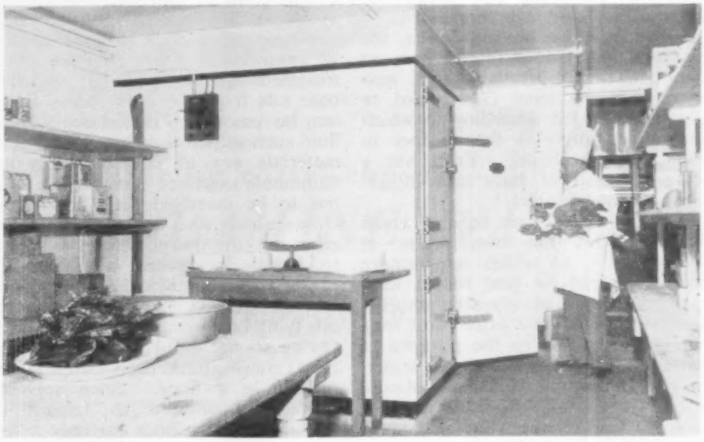
A 14 lb. model potato peeling machine is a must, but, however efficient it may be, there needs to be a hand peeler to remove eyes from the potatoes. Machines should not be loaded until they have first been switched on; and the machine should be sited near the vegetable store and in a position where the used water can be readily run into a convenient drain.

Major items of cooking equipment should include oven space of at least 21 cubic feet, and this might be in the form of ovens with boiling tops or as unit ovens or in the form of a cabinet oven. Where unit or cabinet ovens are employed, it is necessary to have a boiling table which should have a surface area equal to 700 square inches. There should be grilling capacity equal to 200 square inches though this figure might be reduced where only main meals are served.

A steaming oven of at least 6 cubic feet should be provided and, where possible, use should be made of the works steam power where this exists. This use of existing steam should also apply to boiling pans. Another consideration is whether to have large boilers of the steam-jacketed kind or smaller ones which are not too heavy for women to lift and carry. A 5-gallon boiling pan is quite heavy and awkward to carry even when only half full of liquid. In the case of a 10-gallon static vegetable boiler, the pan can be drained without any lifting or carrying being necessary.

An assortment of saucepans in varying sizes from 2 pints to 3 gallons should account for the first 10 gallons of the total necessary capacity of 50 gallons ; the remainder should be made up of two 20-gallon vegetable boilers.

The fish fryer should be a two-pan affair; some are available in unit types, and can be built in banks together. It is worth while to consider the saving in fuel and food by having the fryer equipped with thermostatic control. And if it is not found



A typical coldroom for the medium canteen is this **Prestcold** unit with a capacity of 100 cubic feet.

For 250 Main Meals

1. ***Refrigerator space should be at least 75 cubic feet.***
2. ***A 20-quart electric mixer.***
3. ***A 14-lb. potato peeling machine.***
4. ***Oven space of at least 21 cubic feet and a grilling capacity of 200 sq. ins.***
5. ***A steaming oven of at least 6 cubic feet capacity.***
6. ***Saucepans with a total capacity of 50 gallons.***
7. ***A double washing-up sink with ample draining boards and drying racks.***

necessary to fit hoods or canopies over other items of kitchen equipment, it is desirable to have a hood over the fish fryer for obvious reasons.

In considering the size of the pans it is also necessary to take their depth into account; as a rough guide, a pan one square foot in area will accommodate 3 lb. of fish or 3 lb. of chips. A stock pot of 10-gallon size preferably with its own stand and heating can be a great help in the preparation of gravies and soups.

For washing-up, a double sink is needed with ample draining boards and drying racks at either side. Where a dish-washing machine is used, it is still necessary to have a sink for stand-by. There are several ways of providing hot water for dish-washing and, where steam heating already exists in the works, the choice is an obvious one. Where no steam heating is available it is wise to consult the local Gas Board or Electricity Board according to which source of supply is the cheaper in your neighbourhood. Each has a wide selection of bulk and instantaneous water heaters.

Sterilising sinks can be had which will maintain the rinse water at 170 deg. F., at which temperature articles should be held for at least two minutes to air-dry satisfactorily. Special wire baskets fitted with long handles are used for the purpose of removing the articles from the water. In considering the sinks, one should not overlook the sink-tidies and the swill bucket. Sinks which are made of porcelain are less kind to crockery than the stainless steel type.

CANTEEN ADVICE BUREAU

Lighting

We are building a stage at one end of our canteen dining-room and would be glad if you could offer advice regarding an effective system of lighting. (J.Y., Manchester.)

THIS question is discussed fully and authoritatively in the handbook of the British Electrical Development Association called "Electricity in Schools." You should write to the British Electrical Development Association at 2 Savoy Hill, London, W.C.2, or call at the local offices of the Electricity Board and discuss your problem fully.

Recipe Service

I am told that there is a free recipe service available which deals with the use of canned foods. Where should I write to get the recipes in question? (R.L., Highgate.)

YOU are doubtless referring to the series of recipe leaflets being issued by the Canned Foods Advisory Bureau, 17 Wigmore Street, London, W.1. Primarily these recipes, which have been tested in the Experimental Kitchen of the Canned Foods Advisory Bureau, are intended for the housewife. The first of the leaflets in this series is called "Entertaining Without Fuss" and is attractively illustrated. Recipes can, however, be adapted according to requirements and it may well be that future leaflets will provide many a useful idea for the canteen dietary. The service is conducted by Miss McNab to whom requests should be made to have one's name included on the mailing list.

A Moral Obligation

I wish to know if I am under any legal obligation to provide a canteen for workers at my factory. (J.S., Birmingham).

WHEN certain provisions under the Emergency Powers of the Defence of the Realm Act were revoked, the obligation to provide a canteen for workers was ended. There is, however, a moral obligation to have some regard for the welfare of one's staff and in these days it is a very shortsighted employer who would seek to evade this responsibility. **There is still provision under the Act for the power to enforce the provision of canteens to be re-introduced.** It should, however, never be necessary to have to remind an employer of his duty to his staff. A well-run canteen can be a great asset to a firm since it is a factor which encourages recruitment and has its part in the fight for higher productivity.

How to Keep the Shop-Floor Clean and *Safe*

(*Continued from page* 300)

the floor will not percolate to the surface nor fresh oil-drippings be absorbed into that pitch coating.

Pitch and oil produce a mixture which is relatively hard, impervious and durable. The durability may be improved in a simple way by spreading coarse sand or finely crushed coke over the hot pitch before rolling.

Where such a pitch covering cannot be adopted, or where the hot alkali treatment has not removed mineral-base oils from the floor, these latter may be removed by means of a solvent fluid such as petrol or benzine. These materials are, of course, highly inflammable therefore considerable care has to be exercised. Carbon tetrachloride may also be used with good effect for this purpose, and is easier to handle since its inflammability is much less than benzine. The action of these solvents is to dissolve mineral oils lying on or near the floor surface. Owing to the rapid evaporation rate they cannot attack deep-seated layers of oils in a floor. Such solvents should be allowed to remain in contact with the floor for only a *few minutes*, thereafter being swept off by brushing, an operation often greatly eased by first sprinkling the treated floor surface with clean sawdust or fine ash.

These solvents are expensive materials, thus the treatment is always costly. Therefore, their adoption will usually be in the case of floors which have become saturated with mineral-oils over long periods. Both the hot alkali swilling treatment and the use of solvent cleaners may be applied to almost any kind of floor surface material.

Whatever treatment is applied, once the floor has been cleaned, great care should be observed to prevent any further impregnation. This can be easily done by immediately sprinkling oil-pools with sawdust and sweeping off in the usual way, after the oil has been absorbed into the sawdust. If the floor surface should soften at some future date as a result of oil contact with the pitch layer, a further coating of this material may be quickly applied to give a second coverage.

Adoption of these simple treatments will be the means of preserving floor materials, and, best of all, of eliminating innumerable accident risks.

POUNDS, SHILLINGS AND PLATES!

Broken plates reduce catering profits. But with Streetly Melamine Ware, it's a case of "look after the profits, the plates will take care of themselves". That is because Melamine Ware is so strong. It is light and easy to handle and the customers like its clean lines, pleasing colours and complete freedom from unsightly, unhygienic chips.

To cut your catering costs—choose

STREETLY MELAMINE WARE

May we send you further information?

B·I·P GROUP

THE STREETLY MANUFACTURING CO. LTD.,
1 Argyll Street, London, W.1

BRITISH
GOOD HOUSEKEEPING INSTITUTE
GUARANTEES

"I'll dictate it all on the *Stenorette*

. . . to be typed first thing in the morning"

The Grundig Stenorette office tape-recorder gives 25 minutes dictation. Sound is kept level with Automatic Volume Control and same tape is used again and again. The hand-microphone, into which you dictate, controls stopping and starting. Your typist will listen through light-weight earphones, stopping, starting and *back-spacing* by either a foot or finger-operated remote control. An illuminated time-scale tells you both to a syllable how far dictation has run.

Your local radio or office equipment dealer will demonstrate this wonderful machine for you—ask about it NOW.

GRUNDIG

Stenorette

DICTATING MACHINE

35 GNS. **(With Tape Spool and Dust Cover)** Transcription Outfit (earphone and foot switch), 6 gns. Dictating Outfit (microphone and dictation pads), 6 gns.

Available through authorised retailers only

ON DUTY 24 HOURS A DAY

Write for illustrated Brochure to :—

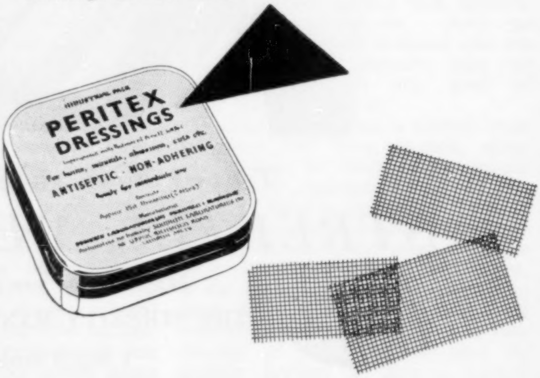
GRUNDIG (Gt. Britain) LTD.
KIDBROOKE PARK ROAD, LONDON, S.E.3
(Electronics Division, Gas Purification & Chemical Co. Ltd.)

PERITEX
IN INDUSTRY

THE HANDY FORM OF TULLE GRAS DRESSING

For cuts, wounds and burns

Tulle Gras is medically accepted as a speedy and effective treatment for burns and wounds. Free drainage helps quicker healing and its painless removal makes it popular with Doctor and Patient alike. "PERITEX" Tulle Gras offers many advantages over standard dressings. No scissors or tweezers are required. Already cut into convenient sizes, each dressing is wrapped in transparent covers so that it can be applied untouched by hand. Simply slide off the covers when placing on the wound. Tins of 150 dressings in two sizes.



Full information from Sole Distributors to Industry:

SOUTHON LABORATORIES LTD
84-88 UPPER RICHMOND ROAD, LONDON, S.W.15

New Industrial Equipment

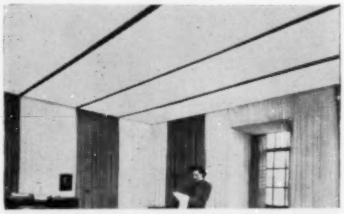
EXECUTIVES' SURVEY OF AIDS TO INCREASED PRODUCTION

Readers who wish to know the suppliers of any of the products referred to in this section are asked to write to the Editor, quoting the reference number which appears at the end of the paragraph. We are always glad to consider for publication descriptions — preferably accompanied by an illustration suitable for reproduction — of new products.

Lighting

LUMINOUS CEILING

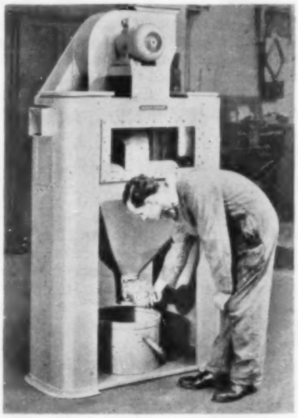
INTRODUCED, it is believed for the first time in this country, this new architectural lighting system consists of a ceiling of corrugated, translucent vinyl sheet, supported on a framework of lightweight steel, suspended 18 in. below fluorescent or tungsten lamps. The plastic sheeting diffuses the light to form a completely luminous ceiling, giving what is claimed to be the nearest approach to natural daylight of any lighting system yet devised. The reflecting qualities of the cavity surfaces are important for the basic principle of the ceiling is that every part of the cavity will reflect light to other parts in a similar manner to the integrating cube. Designed to ensure flexibility in lay-out, the steel framework weighs only 12 ounces per square foot, all metal parts being bonderised and heavily stove-enamelled to prevent corrosion. The ceiling is easy to clean and, in this connection, it is necessary simply to withdraw one or more of the plastic sheeting sections to expose the lighting fittings. Supplied in rolls 3 ft. wide and up to 25 ft. long, the corrugated sheeting is pulled along between the channels of two H-section tracks and held in place by plastic clips. (**PM/857**.)



Ventilation

HYDROSTATIC DUST COLLECTOR

LARGE quantities of air and heavy dust concentrations are handled by this new type dust collector. Streamlined in appearance, the collector employs a hydrostatic cross tube element, scrubbing dust laden air in either water or oil. It is compact and is claimed to bear a high air volume to cost and space ratio, operating without either pumps or sprays. The unit has a high separation efficiency and is said to be highly suitable for the chemical trade in its widest applications, special safety features being afforded for the handling of explosive materials. The collector is made in a range of sizes to suit all applications from 200 to 100,000 c.f.m., the larger models being fitted with multiple cross tube elements and automatic sludge disposal. In the case of soluble dusts where no sludge is formed it is usual to arrange for drainage, either to waste or to a reclamation process, according to the value of the dust. (**PM/858**.)



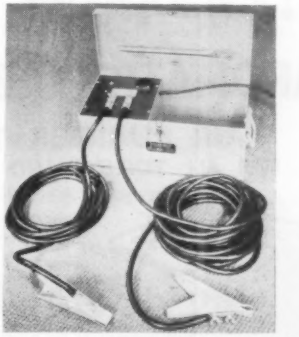
ALL-PURPOSE AIR CONDITIONER

COMBINING in one portable appliance the functions of an air heater, cooler and humidifier, this air conditioner is designed to provide full circulation of filtered air in buildings. Measuring only 18 in. high, 13½ in. wide and 11 in. deep, it weighs 16½ lb. and its single-phase A.C. motor enables it to be used with 110 v. or 200-250 v. supplies. The mechanism comprises a four-blade fan which draws air through a moistened air filter cloth and thence through a mist of water droplets. The spray produced by the fast moving rubber fan belt and pulley is sustained by a reservoir holding about six pints. Air impurities are thus trapped and are disposed of by the renewal of the water and rinsing of the pad under a tap. The appliance also acts as a deodoriser and, it is stated, the addition of a little disinfectant to the water forms a defence against airborne infections. A separate switch brings into operation a 1 kW. heating element in front of the fan. Finished in a durable blue enamel, the conditioner has chromium plated grille front and fittings. (**PM/859**.)

Efficiency Aids

EASY PIPE DEFROSTING

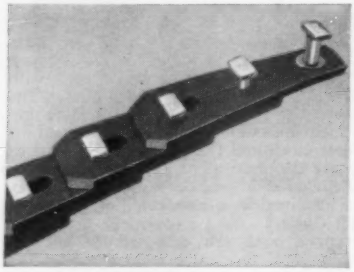
DESIGNED to prevent failures of the water supply caused by freeze-ups, this device comprises basically a step-down transformer which can be run from any alternating current supply point. From the readily transportable case, measuring 23½ in. by 10½ in. by 10½ in., run two heavy-duty cables which attach to the frozen pipe at either side of the ice plug. Standard cables measure 15 ft. by 45 ft. respectively, but special cables are available which enable any run of pipe



up to 100 ft. long to be cleared in a single operation. The capacity of the defroster is 2kW, this power, it is stated, being sufficient to melt ice in a ½ in. pipe at the rate of over 9 ft. per minute. The manufacturers also claim that it is equally suitable for use on copper, brass and cast iron steel piping. Plastic pipes too can be treated, if a satisfactory electrical contact can be made with water. **(PM/860.)**

SMOOTH LINKING

THIS new and improved smooth-running Vee Link Belting is supplied on reels 50 ft. long, with every link a complete and detachable unit. It is easily fitted and the bearings need not be dismantled when fitting. The belting also absorbs shock loads and is manufactured in four sizes, all of which can be economically replaced. Prices range from 3s. per foot "M" ⅜ in. top width, Size O, to 5s. per foot "C" ⅞ in. top width, Size 3. 40 deg. angle. **(PM/861.)**



EASY COUPLING

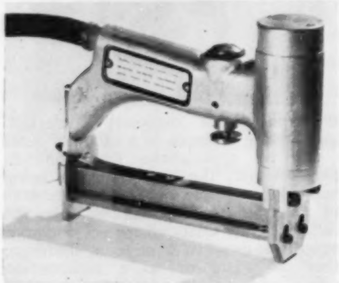
INSTANTANEOUS self-sealing with no leaks is claimed for a new type of air-hose coupler now being produced. Designed for high and low pressure air-hoses, the coupler incorporates a unique rubber seal ring with a simple action. The stem of the coupler is inserted into the spud, air is turned on, and this causes the rubber ring on the stem to "rock" forward giving the initial sealing action. As the air pressure is increased so the complete sealing action is effected.

The coupler requires no spanners or tools to couple or uncouple. It cannot be uncoupled accidentally, or deliberately while under working pressure. An additional safety factor is a special spring bridle which holds the two parts together, and has been designed to allow the stem to rotate within the spud for the removal of kinks and twists in the hose.

Potential buyers are being offered a one month's free trial of any one size of coupler. The range being manufactured covers hose sizes of ½ in., ¾ in., and 1 in., as hose-to-hose coupler or compressor-to-machine coupler. **(PM/862.)**

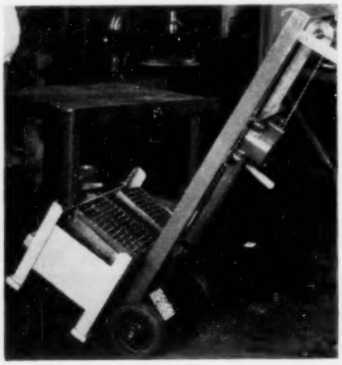
NEW STAPLER AND TACKER

DETAILS are now available of a new pneumatic stapler/tacker, powered from any normal source of compressed air at a pressure of 40-50 lbs. p.s.i. Operation is by means of a push-button trigger and the positive and constant driving power exerted by the compressed air ensures even and efficient fastening. Weighing 2½ lbs. as a tacker, the unit is mobile and designed to reduce operator fatigue. When fitted with an anvil for stapling, the weight of the unit is 2¾ lbs. The stapler takes 105 industrial staples in ⅛ in., ¼ in., ⅜ in., or ½ in. sizes. **(PM/863.)**



FORK-LIFT BARROW

DESIGNED to meet a need in industry for a small light duty fork-lift truck for operation in restricted spaces and down narrow gangways, this machine is used like a sack barrow for transport of goods between processes. At the work bench, the unit stands vertically so that the load can be raised quickly by means of the self-sustaining hand-operated winch. In the raised position the machine may be pushed into the bench to enable the load to be deposited on it. Other applications claimed to lend themselves to its adoption include the loading up to lorry tail boards or the raising of press tools into storage racks. The unit is made in two capacities, 1 cwt. and 5 cwt. It has a normal lift of 3 ft. 6 in. from the lowered height of 3½ in. above



Remove the Old Bugbear of Foul Odours

AROMATIC TABLETS DISINFECT 24 HOURS A DAY

AIR PURIFIER TABLETS

FOR ALL TOILETS AND CLOAKROOMS

AIR PURIFIER TABLETS	
3 Doz.	35/-
6 Doz.	68/-
1 Gross	130/-

PAT. 683238
REG. 862807

HOLDER—PRICE 4/6 EACH

DISINFECTANT "G" BLOCKS

FOR GENTS' STALLS AND CHANNELS

G-BLOCKS FOR STALLS	
3 Doz.	28/-
6 Doz.	55/-
1 Gross	105/-

CARRIAGE PAID

SLIP TABLET INTO APERTURE—CANNOT BE REMOVED OR STOLEN

AROMATIC DISINFECTANT BLOCK CO. LTD
9 AUGUSTUS ROAD, LONDON, S.W. 19

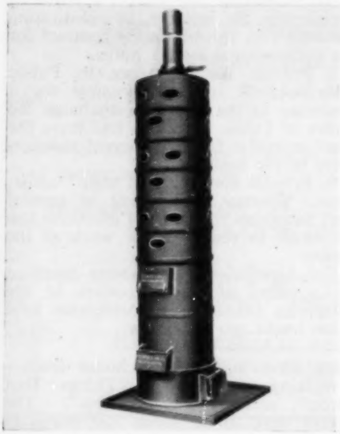
ONE BLOCK IN EACH STALL—THEY NEED NO FURTHER ATTENTION

floor level, and can be modified to suit specific requirements. (**PM/864.**)

Heating

ECONOMICAL WARMTH

THIS slow combustion stove is constructed of robust cast-iron sections, and is designed for factory heating by convected warm air currents. It has been scientifically designed, say the makers, to ensure greater heat at lower fuel costs. By means of the flue gases rising in a zig-zag form, the inclined triangular air chambers are soon warmed; and the violent air flow produced ensures a rapid delivery of heat to the outer air. The heater can be installed without the use of skilled labour, requires little attention and will burn the commonest and cheapest types of fuel. (**PM/865.**)



Safety

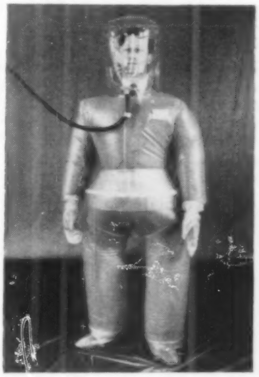
SAFER WELDING

NEWLY marketed in the United Kingdom is a new, completely insulated, welding electrode holder which has been treated for greater strength, hardness and conductivity. It is claimed to give complete protection from accidental arcing, thus safeguarding the welding operative and his work throughout the welding operation. The insulated crown channel type jaws give the holder more heat resistance and durability and the handle is designed to give greater ventilation. (**PM/866.**)

UNUSUAL BUT SAFE

THIS plastic suit is claimed to give complete protection against radioactive dust and particles and other harmful atmospheres such as are found in chemical plants.

The clothing is in two parts: the upper half consists of a jacket with an integral transparent hood, while the lower half combines trousers and overboots. All the seams in the clothing are welded electronically and the two halves button together at the waist where they are sealed by a 2-in. wide strip of cellophane tape. A compressed air line is fitted to the transparent hood and the constant flow of air maintains an internal pressure of approximately ½ lb. p.s.i. throughout the suit. Even if any minor leaks should develop anywhere in the suit, the internal pressure, being higher than the external atmosphere, is enough to repel any radioactive dust.



The air escapes through an exhaust

Skim the Cream

Advertise first in the DAILY HERALD

for SKILLED WORKERS!

Employers all over the country use Daily Herald Classified columns for finding skilled replacements for every trade and craft. They know that of its *6,786,000 readers *more than half* are in skilled occupations.

Every Classified advertisement appears in ALL copies covering TOTAL circulation.

**I.I.P.A. Readership Survey.*

DAILY HERALD

Rate 20/- per line. Communications should be addressed to:
Classified Advertisement Manager "Daily Herald,"
Acre House, Long Acre, London, W.C.2.
Telephone: Temple Bar 1200 (Extensions 454 & 466)

valve at the back of the suit. The constant flow, say the makers, keeps the wearer cool and comfortable and prevents the formation of moisture or misting on the hood. (**PM/867.**)

Canteen

POWER MIXING

OPERATING at controlled speeds ranging from 5,000 to 17,000 revolutions per minute, this twin food mixer comprises a heat-resisting glass goblet, fitted with tough metal blades, and a mixing bowl, which is equipped with planetary whisks. The power unit is located in the base and all moving parts are thus totally enclosed. Both pulveriser and mixing bowl are operated by special gear drive from a single power unit. The base drive, eliminating overhead arms, allows closely-fitting lids to be placed over the goblet and mixing bowl to prevent splashing. An adaptor is available for use when only one unit is required. In addition to the twin model, the manufacturers also market a Senior and Junior model of the mixer. (**PM/868.**)

NEW TRADE LISTS

Stergene and Domestos in Catering. Issued by *Domestos, Ltd.*, of Newcastle-upon-Tyne, this booklet gives useful information on cleansing in the canteen.

Cleansing and Disinfecting Products. Alexander Duckham and Co., Ltd. This leaflet describes the firm's wide range of cleansing and disinfectant products which includes anti-dermatitis preparations and skin cleansers, barrier creams and liquid soaps.

" Sanoid " First Aid Requisites (Catalogue No. 43). Published by *Cuxson Gerrard and Co., Ltd.*, Oldbury, Birmingham. Already well known as manufacturers of industrial first aid equipment and dressings, this firm have now extended their range of products to include surgical dressings, first-aid requisites, sterile preparations, pharmaceutical products, plasters, ligatures and sanitary specialities, all of which appear in detail in the loose-leaf pages of this publication. A complete list of prices has been added as a supplement to the catalogue.

How to Reduce The 'Top Man's Burden'

NINE ways in which the burden on top management might be reduced are suggested in a recent pamphlet by industrial consultant, Lt.-Col. L. F. Urwick. The pamphlet is called "The Load on Top Management—Can It Be Reduced?" and it advocates the following nine steps :—

1. Change the organisation structure of the business. Beyond a certain point, as was said a century ago, organisation is indispensable to growth.
2. Adopt a formal organisation pattern. Exact definition of jobs and functions is justified by all business experience.
3. Distinguish policy-making (the Board) from policy-execution (the Management).
4. Provide separately for the research aspects of policy-making. This is a burden too often imposed unnecessarily on those responsible for policy-execution.
5. Unify responsibility in a single chief executive.
6. Decentralise and delegate general management functions. This has up to now been done most commonly by functional specialisation (Works, Sales, etc.). But it can additionally be done by decentralising into virtually separate units (by product, area, etc.) each with a manager with all-round responsibility.
7. Provide for assistance in Industrial Relations—

By appointing an effective Industrial Relations officer.

By ensuring that some person on the Board has special experience of Industrial Relations.

By establishing an independent appeal procedure within the business.

By increasing the worker's sense of partnership, for instance, by substituting a monthly or three-monthly contract for the conventional week's notice.

8. Provide for assistance in Public Relations. It is often possible for a chairman of the Board to discharge the duties of Public Relations and leave the chief executive free for internal management of the business.
9. Provide for "general staff" assistance. Younger men acting as general staff assistants to the chief executive can do much to reduce paper work at the centre.

Col. Urwick's proposals were discussed by a panel of top executives at the European Management Conference held a few weeks ago at Torquay.

IN BRIEF

A GROUP of Midland youth employment officers, divided into a series of teams, is undertaking an experimental job analysis survey, the first results of which are now becoming available. Industry by industry, first-hand information about the numerous occupations open to school-leavers is collected. The group's first report, relating to the railway industry, has now been completed and is installed as a valuable aid in every youth employment office in the Midlands. A second report is now being completed on the bakery and confectionery industry, and surveys on the clothing and the foundry industries are in progress.

* * *

An essay competition for the junior employees under 18 years of age, was held recently by The Sheffield Area Industrial Group of RoSPA. There were three subjects to choose from—"Walking in Works", "Things That Drop", and "Works Tidiness". The essays were to be about 250 words in length, and the subject matter was considered more important than grammar.

* * *

A picture of the successful warfare now being waged against tuberculosis is given in the annual report (for 1953-54) of the National Association for the Prevention of Tuberculosis, issued recently.

* * *

"If overtime is necessary for the industry and the industry is necessary for the trade and well-being of the nation, then overtime is obligatory in some form upon all who work in the industry. Everyone is obliged, by a moral compulsion, which is and always must be voluntary, to do his share of overtime." (*The Archbishop of Canterbury on the recent dock strike.*)

"SA-FIR" protective MASK
Patent No 680,339
- HIGH QUALITY
- HYGIENIC
- LOW COST
- LOW WEIGHT

An efficient—Light—DUST MASK at low cost, which your workers will wear with comfort.

CHAPMAN & SMITH LTD.
HOLDERS HILL CIRCUS, LONDON, N.W.7

THE GENERAL LIFE ASSURANCE COMPANY
Est. 1837

Well Known for Pension Schemes

Explanatory Booklets from :—

ACTUARY & SECRETARY,
GENERAL BUILDINGS,
PERTH, SCOTLAND,

or from the local office of any of the "General" group of companies comprising :—

GENERAL ACCIDENT FIRE & LIFE ASSURANCE CORPORATION LIMITED

ROAD TRANSPORT & GENERAL INSURANCE COMPANY LIMITED

SCOTTISH GENERAL INSURANCE COMPANY LIMITED

HOSTESS

OFFICE CHAIRS

Illustrated Model 402. A superior Office Chair combining Comfort, Durability and Economy.

- Large size seat with LATEX FOAM 3" depth.
- Semi-adjustable swivel back with one-inch sorbo-rubber interior.
- Attractive upholstery — 'non-shine' Florestin.

Price £6.11.6 plus Purchase Tax 24/1. Other models from £4.6.0 plus Purchase Tax 15/9.

Typist comfort means increased efficiency.

Send for complete Catalogue of Hostess Tubular Steel Furniture.

UPH60
UPH57
UPH56A

HOSTESS TUBULAR EQUIPMENT LTD
MOXLEY ROAD · BILSTON · STAFFS · Tel.: Bilston 42218

THOMAS CARLYLE
(1795-1881)
WAS RIGHT

"*Give me the man,*" he wrote,
"*who sings at his work! He will do more in the same time—he will do it better—he will persevere longer.*"

MUSIC WHILE YOU WORK

SINCE 1940, a steadily increasing number of factories throughout the country have proved Carlyle's words as a result of becoming subscribers to the

INDUSTRIAL MUSIC
RECORDED PROGRAMME SERVICE

- ● For 14 YEARS this service has earnt the approval of famous industrial and other concerns, works' committees and many thousands of employees.
- ● Balanced programmes of recorded music of suitable duration, chosen and arranged by a panel of qualified experts, are dispatched regularly each week.
- ● Simple in operation and low in cost, there is no easier nor better way of providing the right kind of "Music while you work"—at the times and periods that you decide are suitable for your requirements.

Write for details to :—

Sound Recordings For Industry
131 Sloane Street, London, S.W.1
Telephone : SLOane 2135-6

These Machines Help Creative Workers

By V. BIRD

SOME interesting advances towards the "rationalisation" of drawing office techniques and conditions through the use of draughting machines have recently been recorded in France and Western Germany.

Rationalisation, especially of the means of production, has been practised for decades. In all industrialised countries, scientific progress and advances in techniques are eagerly assimilated in order to reduce costs and speed up production. It is, however, noticeable that little or nothing has been done to apply the principle of rationalisation to the working methods of those whose *creative* efforts form the basis of most scientific progress, viz., draughtsmen. In this connection one is dealing with highly-paid workers to whom pride of place should be given in efforts to advance productive capacity.

In many thousands of private companies and public corporations technical drawing is still carried out using a normal office table and drawing-board in conjunction with tee square and the usual set squares, protractor, etc. Most organisations concerned do not apparently appreciate that a modern draughting machine, by incorporating all the foregoing aids, enables the same work to be carried out in less than half the time. The reduction in hand movements is very considerable, and is indicative of the increase in productivity of the draughtsman when using modern drawing techniques.

The use of a draughting machine results in a still further increase in time saving because the mislaying of instruments and the resulting wearisome hunting about are largely eliminated. This is of the greatest importance, especially for the designer whose constructive thoughts should not be interrupted by his having to search for drawing equipment.

More Important Still

However, there is a still more important reason for the application of rationalisation in the drawing office. From his earliest years a child is trained in sport and work to maintain a good bodily posture, so as not to hinder the functioning of the very sensitive internal organs and to prevent deformation of the bone-structure. Often, however, upon leaving school, the trainee is given a job where he is more or less compelled to ignore the basic rules of bodily posture. In particular, this condition is found in technical drawing offices, where often up to 100 or more draughtsmen are constantly bent over horizontal drawing boards.

The unnatural postures referred to above not only restrict and inhibit the entire functions of the gastro-intestinal tract but also force the spine into almost fakir-like contortions.

In using a horizontal board it is almost impossible to maintain a normal working distance from the drawing unless one is working at the lower edge of the board. In addition, some drawing offices are often illuminated by only a few ceiling fittings which throw the full body shadow of the person bent over the board on to the work.

The abnormally high rate of sickness and absenteeism in French Government offices resulted in the Education Ministry carrying out a thorough investigation, whose results the Director of the Research Commission, Prof. L. Tanon, and his collaborator, J. E. Laurent, published in the "Annales d'Hygiene." The findings of this investigation are so alarming that they should be brought to the attention of all responsible managements. Thus, in the report, it is declared:

"This posture (on a horizontal drawing-board) has, sooner or later, resulted in certain deformations of the bone structure and also produced in the majority of cases painful digestive disturbances . . ." The compression of the lower part of the thorax can also cause serious difficulties with regard to the functioning of the respiratory organs, since normal breathing is noticeably hindered and the volume of the necessary air intake lessened." The Report continues: "Of 30 draughtsmen in a large organisation serious stomach complaints were evident among 17. When, following the demand of the firm's doctor, modern tables were introduced, a rapid improvement was effected although for certain serious cases a surgical operation could no longer be avoided." The report also quotes the case of a draughtsman who when he finished work was not able to straighten his back and regain an upright stance until he was in the train on his way home. This state of affairs lasted for 20 years and led to a very serious kyphosis.

The installation of modern draughting machines equipped with their own light sources together with the use of sprung and adjustable drawing chairs will do much to increase the productivity in drawing offices, at the same time promoting healthy and agreeable working conditions. By varying the seat height and adjusting the back rest, the drawing chair can be tailored to fit the build of the draughtsman. As a result a good bodily posture is assured and this fact greatly reduces bodily fatigue.

John Lewis Partnership Ltd. wish to point out that, in connection with the article which appeared on pages 180 and 181 of our October issue, the amount of Partnership Benefit distribution or General Bonus, as it has become, is fixed by the chairman no doubt after consultation with his Conference. It is thus not really possible to give any definite percentage as being the annual cost.

New Impetus For Factory Health

PLANS to stimulate the development of industrial health services in workplaces covered by the Factories Acts have been announced in the House of Commons by the Minister of Labour and National Service (Sir Walter Monckton). They include the appointment of a standing Industrial Health Advisory Committee to advise the Minister, a review to find out where industrial health services are most urgently needed and the promotion of surveys and field investigations where further information is required to determine the need for preventive measures or research. The Minister paid tribute to the work already done in industry, both voluntarily and under the Factories Acts. He expressed the feeling, however, that a new impetus is now wanted to extend and develop the provision of health measures in factories. This he proposes to give, acting within the framework of existing legislation.

The industrial health services are not limited to purely medical matters. They include the provision of: (1) Good environmental conditions — sanitation, heat, light, ventilation, atmosphere and cleanliness—at the place of work; (2) protection against disease and poisoning resulting from the process of work and the materials used; and (3) adequate medical and nursing supervision and first aid.

The scheme will be carried out through H.M. Inspectorate of Factories, and a new administrative Industrial Health Branch has been established in the Ministry.

A Plea For The "Uncommon Man"

ADDRESSING the annual general meeting of *Tube Investments, Ltd.*, the chairman, Sir Ivan A. R. Stedeford, referred to the company's training programme which, he said, was not restricted to those at the beginning of their career. The efficiency of a works ultimately depended on the men on the shop-floor, and on those responsible for their direction. Full-time residential courses were open to foremen and charge hands, and to promising operatives, so that every employee had a chance to develop his capacity and secure promotion. Speaking on wage differentials in relation to the skilled and the unskilled, Sir Ivan said that he believed the inevitable difference in men's qualifications and technical knowledge called for a greater differentiation in wages than now existed. There had been a tendency in recent years to narrow the wage gap, but he felt that such a policy was unrealistic. Ours might be known as the age of the "common man", but he asked, in our zeal to do him well, were we not in danger of giving the "uncommon man" a raw deal?

One accident affects everybody

You know the immediate cost of an accident to one of your men. But you're reckoning without the after-effects on the *rest* of the men. Those who saw it happen tell others. Everybody on the site or in the yard tends to be apprehensive and the steady rhythm of production is disrupted.

80% of foot accidents mean crushed toes!

This startling fact shows you how important, how *vital* Dunlop Safety Boots are as a contribution to efficiency. Dunlop Safety Boots incorporate tested steel toe-caps, able to withstand an impact of 150 ft. lbs. Dunlop boots are stoutly reinforced at all important points. Additionally, they're completely waterproof, being made by the exclusive latex seamless process. Choice of knee or ankle high boots. Increase working efficiency—cut your accident rate—

Equip your men with DUNLOP SAFETY BOOTS

DUNLOP RUBBER COMPANY LIMITED
(Footwear Division) · SPEKE · LIVERPOOL · 19

DUNLOP
B S
953/1
TOE CAP

4F/MB134

FACTORY ACT REQUIREMENTS

Supply your workers with
"DELCO"
LIQUID TOILET SOAP

Used in Corporation Departments, Railway Transport and Public Utility Undertakings, Offices, Canteens, R.A.F. & R.O.F. Factories, etc.

HYGIENIC
ANTISEPTIC
ECONOMIC

Samples and Quotations on application.
Tip-up Dispensers Supplied.
(Please Quote this Journal).

W. M. DELF (LIVERPOOL) LTD.
SOAP AND DISINFECTANT MANUFACTURERS
DELCO WORKS, LIVERPOOL, 9.

"Wheelers of Plaistow"

specialists in the manufacture of

OVERALLS
for
MEN
and
WOMEN
in every Trade

The **"VOLE"** *Brand* DIGNIFIES THE JOB

H. WHEELER & CO. LTD.
Overall Clothing Manufacturers
107 LONDON RD., PLAISTOW, E.13
Telephone: GRAngewood 4071

Summary of Official Publications

READERS' GUIDE TO ACTS, STATUTORY ORDERS, NEW RULINGS AND AWARDS CONCERNING INDUSTRY AND PERSONNEL

STATUTORY INSTRUMENTS

No. 1291. The Road Haulage Wages Council Wages Regulation (Amendment) Order, 1954. Dated September 30, 1954, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 4d. (Amends orders R.H.46 and 48, by increasing the statutory minimum remuneration fixed by those Orders. Order R.H.48 is revoked.) Operative from October 20, 1954.

No. 1302. The Stamped or Pressed Metal-Wares Wages Council (Great Britain) Wages Regulation (Amendment) Order, 1954. Dated October 1, 1954, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 3d. (Amends Order O.78, by increasing the statutory minimum remuneration fixed by that order.) Operative from October 18, 1954.

No. 1365. The Firemen's Pension Scheme Order, 1954. Dated October 15, 1954, made by the Home Secretary under Section 26 of the Fire Services Act, 1947 (a). *H.M.S.O.* 3d. (Amends the Firemen's Pension Scheme, 1952, making further provision for the allocation by a fireman of a portion of his pension in favour of a dependant and for the counting for pension purposes of certain service as a fireman rendered before the coming into operation of the Fire Services Act, 1947.) Operative from November 1, 1954.

No. 1400. The Milk Distributive Wages Council (England and Wales) Wages Regulation Order, 1954. Dated October 22, 1954, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 6d. (The First Schedule sets out the statutory minimum remuneration payable in substitution for that fixed by Orders M.D. 72, 74 and 76. The Second Schedule repeats without alteration the amendment to Order M.D. 62 which was contained in M.D. 74. Orders M.D. 72, 74 and 76 are revoked.) Operative from November 7, 1954.

INDUSTRIAL COURT AWARDS

No. 2529. Needle, Fish Hook and Fishing Tackle Industry. Reference: To determine certain specified claims on the employees' side. **Award**: Claim established as set out in the terms of reference, save that the figure of 2d. per hour claimed is amended to 1¼d. per hour. (30/9/54.)

No. 2530. Civil Air Transport. Reference: To determine an application from Air Stewards and Stewardesses for (*i*) a 20 per cent increase on the basic rates for ages 17, 18, 19 and 20, and Stewards Class III, and an increase of 20 per cent calculated on the basic minimum rates in the pay scales of Stewards Classes I and II and Head Stewards; and (ii) an increase of 1s. 6d. per day in the rates of Daily Allowance B.O.A.C. and Night Stop Allowance B.E.A. **Award**: That (*a*) the basic rates of pay of Steward trainees aged 17, 18, 19 and 20 shall be increased by 5s. per week, (*b*) the basic pay of Stewards Class III shall be increased by 12s. per week; (*c*) Stewards Classes I and II and Head or Senior Stewards receive increases of 14s. per week; (*d*) The B.O.A.C. and B.E.A. Allowances shall be increased by 1s. 6d. per day respectively. (1/10/54.)

No. 2531. Government Industrial Establishments. Reference: To determine an application by Admiralty Telephone Operators that regular Sunday attendance shall be included within the 44-hour week. **Award**: Claim established. (5/10/54.)

No. 2532. Civil Air Transport. Reference: To determine an application by pilots employed by Independent Operator Members of the National Joint Council for Civil Air Transport for adjustments in the rates of pay of pilots employed under the terms of the Agreement dated May 20, 1953, which would bring them into line with the rates paid to the pilots employed under the terms of the Agreement dated February 21, 1950, by the Airways Corporation. **Award**: The Tribunal rule that the pilots concerned shall be paid on the following salary scales: Grade F, £750; E, £875—£995; D, £1,110—£1,380; C, £1,410—£1,610; B, £1,165—£1,995; and A, £2,250. (6/10/54.)

No. 2533. Government Industrial Establishments. Reference: That the agreed lead rate of 8s. for men employed as bonders at the R.N. factory at Caerwent shall be maintained. **Award**: The Tribunal find against the claim, subject to the proviso that bonders, who, prior to June, 1954, were in receipt of the lead rate of 8s. per week, shall continue to receive that rate on a personal basis as from June, 1954, and for such time as they are retained in this employment. (7/10/54.)

No. 2534. National Health Service. Reference: To determine a claim for increased sessional rates of pay for part-time clinical psychologists in the National Health Service. **Award**: That (i) with effect from March 1, 1954, the sessional rates of pay shall be *pro rata* to the mean of the appropriate scale of the full-time employee, plus 10 per cent; (ii) the claim "that after 10 years' service in the same or a higher grade, at an average weekly rate of six sessions or more, the sessional rates of pay arrived at under (i) should be further increased by relating them to the maximum of the scale plus 10 per cent instead of the mean plus 10 per cent," has not been established. (19/10/54.)

No. 2535. National Health Services. Reference: To determine a claim by Nursing Auxiliaries for a national scale. **Award**: That (*a*) with effect from November 1, 1954, the salary scale for nursing auxiliaries aged 21 and over shall be £300—£395 per annum, and for men aged 21 and over, £315—£410 per annum; (*b*) the charge to resident adult staff for board and lodging shall be £132 per annum. The court refer a number of matters back to the parties for further negotiations, but, in the event of failure to reach agreement, either party shall be at liberty to report such failure to the court who will then determine the matters in dispute. (22/10/54.)

No. 2536. Shipping Industry. Reference: To determine claim by ship riggers for increased rates of pay, the employees contending that the terms of the last increase adopted by the shipbuilding industry should be applied. **Award**: That the basic rate of pay for riggers shall be increased by 6s. 6d. per week. (25/10/54.)

No. 2537. Shipbuilding Industry. Reference: To determine claim by ship scalers, tank cleaners and engine room workers for an increase in the existing basic rate of pay, the employees contending that the terms of the last increase adopted by the shipbuilding industry should be applied. **Award**: That the basic rate of pay for scalers shall be increased by 6s. 6d. per week. (25/10/54.)

No. 2538. Road Haulage Wages Act, 1938, Part II. Reference: Dispute on remuneration paid. **Award**: Claimant shall receive the sum of £9 13s. 4d. (25/10/54.)

No. 2539. Health Services. Reference: To determine a claim by non-resident nursing and midwifery staffs employed in the National Health Service and by local authorities for London Weighting Allowance. **Award**: That the amounts appropriate to the various grades shall be determined by agreement between the parties. In the event of failure to reach agreement within two calendar months from the date of this Award either party shall be at liberty to report such failures to the court who will then determine the matter in dispute. (28/10/54.)

INDUSTRIAL DISPUTES TRIBUNAL AWARDS

No. 608. Rates of Wages of Maintenance Craftsmen Employed in the Papermaking and Boardmaking Industry. Claim: For an increase in the agreed rates of wages for skilled craftsmen, when employed on three-shift and double-day shift systems, of 2d. and 1d. per hour respectively, and when employed on day work they should remain unchanged at the level established by Industrial Disputes Tribunal Award No. 515. **Award**: The claim is referred back to the parties for settlement by negotiation. If they are unable to reach agreement it would be open to either party, should they so desire, to refer the matter again to the Tribunal under the present reference. (29/9/54.)

No. 609. Rates of Wages of Maintenance Craftsmen Employed in the Papermaking and Boardmaking Industry. Claim: For a wage increase of 6d. per hour. **Award**: The question is referred back to the parties for settlement by negotiation, failing which it remains open for either party, should they so desire, to refer the matter again to the Tribunal under the present reference. (29/9/54.)

No. 610. Rates of Wages in the Cotton Industry. Claim: For an increase of 10 per cent in current wages. **Award**: Current wages are increased by 6 per cent. (30/9/54.)

No. 611. Rates of Wages of Maintenance Engineers Employed by a Firm of Roofing Felt Manufacturers and Bitumen Producers at Dundee. Claim: That the company should have paid their maintenance engineers the increase in wages provided under a specified agreement in the engineering industry. **Award**: The Tribunal recommend that the rates of wages for the workers concerned should in future fluctuate with those of similar craftsmen employed in the engineering industry. (1/10/54.)

No. 612. Rates of Wages and Conditions of Employment of Musicians Employed at Certain Catering Establishments in London. Claim: For a minimum wage of £10 10s. per week and for certain specified conditions of employment. **Award**: The minimum weekly wage of the musicians concerned shall be increased by 10s. per week to £10 per week. (6/10/54.)

No. 613. Remuneration of the Planning Officer of the Wiltshire County Council. Claim: That the Council in implementing the recommendations of the Joint Negotiating Committee for Chief Officers of Local Authorities dated May 27, 1952, should have fixed the salary scale of the County Planning Officer at £1,750—£2,000 per annum, or other appropriate scale provided therein. **Award**: That the salary scale applicable shall be £1,650—£1,900 per annum. (7/10/54.)

No. 614. Entitlement to Annual Leave of Domestic and Ancillary Workers Employed in Hospitals and Similar Institutions. Claim: That staff who by reason of absence through sickness or accident are unable to take annual leave due to them should not be debarred from taking such leave upon resumption of duty. **Award**: Claim not established. (12/10/54.)

No. 615. Wages of Card-Setting Machine Tenters. Claim: For an increase in wages of 18s. 4d. per week. **Award**: That the workers concerned shall receive an increase in wages of 8s. 6d. per week. (12/10/54.)

No. 616. Rates of Wages of Sheet Metal Workers Employed in Artificial Limb Manufacture. Claim: For an increase in wages. **Award**: That the basic wages of the workers herein concerned shall be increased by 4d. per hour for Grade A workers, 3½d. per hour for Grade B workers and 2½d. per hour for Grade C workers, with proportionate increases for apprentices. (13/10/54.)

No. 617. Observance of Certain Specified Terms and Conditions of Employment by a Firm of Metal Founders at Sheffield. Claim: For the observance of the terms of a particular agreement in the engineering industry. **Award**: The Tribunal find that the recognised terms and conditions of employment applicable are those agreed upon between the Engineering and Allied Employers' National Federation and the Confederation of Shipbuilding and Engineering Unions, and that the agreement dated April 13, 1954, between these bodies forms part of these recognised terms and conditions. It is further found that the issue as to the application of these terms first arose on May 10, 1954, and it is ruled that the company shall observe such terms and conditions as from that date. (15/10/54.)

No. 618. Rates of Wages and Conditions of Employment of Maintenance Engineering Craftsmen Employed by the Manchester Regional Hospital Board. Claim: That the rates of pay and conditions of employment applicable shall be not less favourable than those provided in a specified agreement. **Award**: That (i) the rate of wages for the workers concerned shall be 3s. 9½d. per hour in the Urban Zone and 3s. 8½d. per hour in the Rural Zone; (ii) normal working hours shall be 44 per week ; and (iii) in all other respects the conditions of employment applicable shall be those provided under the agreements of the Ancillary Staffs Council of the Whitley Councils for the Health Services (Great Britain). (18/10/54.)

FURNITURE AND HIGH CLASS JOINERY

DIRECT FROM THE MAKER

As supplied to many Government Departments
and Factories throughout the Country.

Send for illustrated Catalogues

- **TABLES**
- **DESKS**
- **CHAIRS**
- **CANTEEN FURNITURE**
- **UPHOLSTERY**
- **JOINERY, ETC.**

39/9d.
FREE DELIVERY.

No. P. 3C. UPHOLSTERED CHAIR

Strongly constructed Chair, manufactured from fully seasoned beech. Upholstered in best quality Burn-proof Vynide.

RICHARD ORTON LTD.
LONDON SALES OFFICE,
FINSBURY COURT, FINSBURY PAVEMENT,
LONDON, E.C.2.

MONARCH 4572 (3 Lines) **Works: HIGH WYCOMBE AND LONDON.**

-remember.

the first name for SAFETY

is

AIRGUARD

And remember safety first can depend on your ordering—GUARD Industrial Gloves—in Cotton, Cotton Chrome, Chrome, Asbestos, Nylon, Rubber and P.V.C. GUARD Overalls that are well cut in hard wearing materials.
And the best in all types of Protective Clothing, Footwear and Headwear.

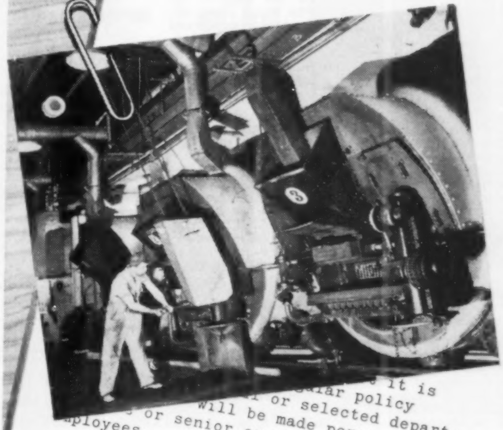
Please write for illustrated catalogue—you will find it useful.

AIRGUARD LTD.
103 KING STREET, LONDON, W.6
Telephone: RIVerside 3642-3-4-5
and Shaftesbury Buildings, 61, Station Street
BIRMINGHAM 5

PROTECTIVE CLOTHING AND EQUIPMENT FOR INDUSTRY
GUARD
TRADE MARK

INDUSTRIAL GLOVES

WORKS' MANAGEMENT
COMMITTEE
MINUTES



it is
ular policy
l or selected depart-
will be made personally by
s or senior executives known to
ployees.

2. EMERGENCY ALARMS

Since it has been decided to install the Rediffusion Staff Location System throughout the factory, it is suggested that an Emergency Alarm System is incorporated. The additional cost is negligible and it will be recalled that no capital outlay is involved.

The system is simple and foolproof. Excellent and immediate servicing facilities are provided.

Sound scheme
H

Personal Control through

REDIFFUSION

STAFF ANNOUNCEMENTS · MUSIC WHILE YOU WORK
STAFF LOCATION · TIME SIGNALS

Nation-wide servicing from 100 local depots

STRATTON HOUSE, PICCADILLY, LONDON, W.1
Telephone: MAYfair 8886

One of the Broadcast Relay Service group of companies

No. 619. Rates of Wages and Conditions of Employment of Maintenance Engineering Craftsmen Employed by the South West Metropolitan Regional Hospital Board. Claim: That the rates of pay and conditions of employment of those concerned shall be not less favourable than those provided in a specified agreement. **Award**: That (i) the rate of wages for the maintenance engineering craftsmen concerned shall be 3s. 11½d. per hour in the London Area, 3s. 9½d. per hour in the Urban Zone and 3s. 8½d. in the Rural Zone; (ii) normal working hours shall be 44 per week; and (iii) in all other respects the conditions of employment applicable shall be those provided under the agreements of the Ancillary Staffs Council of the Whitley Councils for the Health Services (Great Britain). (18/10/54.)

No. 620. Observance of Specified Terms and Conditions of Employment by a Builder at Barnsley. Claim: For the observance of all the recognised terms and conditions of employment in the building industry. **Award**: The Tribunal find that the recognised terms and conditions applicable are those agreed by the N.J.C. for the Building Industry, and in regard to payments for holidays are those set out in the Building and Civil Engineering Contracting Industries Holidays-with-Pay Scheme dated October 28, 1942, as amended on June 25, 1947, by the Building and Civil Engineering Contracting Industries Agreement for payment in respect of Public Holidays. It is ruled that the employer shall observe the aforesaid terms and conditions of employment. (20/10/54.)

No. 621. Observance of Recognised Terms and Conditions of Employment by an Advertising Service Firm at Manchester. Claim: For the observance of certain specified terms and conditions of employment. **Award**: The recognised terms are those laid down in the Working Rule Agreement between the Display Producers and Screen Printers' Association, Ltd., and the Sign and Display Trades Union, dated March 26, 1952, as amended, which the Tribunal rule shall be observed. (22/10/54.)

No. 622. Rates of Wages of Apprentices Employed in the Electrical Contracting Industry in Scotland. Claim: For an increase in the rates paid to apprentices. **Award**: The following rates shall be observed: first year of apprenticeship, 25 per cent of the rate for journeymen; second year, 30 per cent; third year, 45 per cent; fourth year, 55 per cent; fifth year, 70 per cent. (25/10/54.)

GENERAL

Careers for Men and Women (Series 13). Dentistry. Describes qualifications, training and opportunities within the profession. *M.o.L.*, 9d.

Choice of Careers (New Series No. 59). The Accountant. Outlines qualifications and professional training required for membership of one or other of the professional bodies. Openings and salaries are also dealt with.

Civil Service Arbitration Tribunal Award No. 263. Claim: That with effect from January 1, 1951, the London male scales shall apply to Senior Inspectors and Assistant Inspectors in the Horticulture, Poultry and Livestock Inspectorate of the Department of Agriculture for Scotland. **Award**: That (*a*) the following pay scales shall be observed: Senior Inspector, £1,100—£1,475; Inspector, £875—£1,100; Assistant Inspector, £550—£875; (*b*) that the above scales shall be effected from January 1, 1951; and (*c*) that consolidated scales of pay operative from January 1, 1953, shall be discussed between the parties in the light of this award. (30/9/54.)

Civil Service Arbitration Tribunal Award No. 264. Claim: For increased pay scales in respect of certain grades employed in H.M. Prisons and Borstal Institutions in England and Wales. **Award**: An increase of 15s. per week, with effect from May 1, 1954, shall be given to the following: Officers, Principal Officers, Chief Officers (Class II), Chief Officers (Class I), Engineers (Class II), Engineers (Class I), and Foremen of Works. (5/10/54.)

Civil Service Arbitration Tribunal Award No. 265. Claim: For an increased salary scale in respect of Senior Assistant Telecommunications Controllers employed in the Post Office. **Award**: An allowance of £50 per annum — retrospective from January 1, 1954, shall be paid to those concerned. (8/10/54.)

Draft. The Pneumoconiosis and Byssinosis Benefit Amendment Scheme, 1954. Made by the Minister of Pensions and National Insurance. *H.M.S.O.* 4d.

Final Report of a Court of Inquiry into a Dispute in the London Docks. Gives the conclusions of the Court in regard to liability of dock workers for overtime working. *H.M.S.O.* 9d.

December Diary for Management

BACIE
2 **Derby.** Talk on "The Work and Value of Adult Colleges."
7 **London.** Talk on "A Glimpse of Day Release Education in Western Germany."
7-11 **Midhurst, Sussex.** Post-secretarial Conference.

BURTON MANOR
5-17 Two-weeks Course (No. 545) on "Supervisory Management."

CORPORATION OF SECRETARIES
7 **Chester.** "The Development of British Broadcasting."

INDUSTRIAL CATERING ASSOCIATION
7 **Birmingham.** Miss E. M. Parkinson on "Christmas Party."

INDUSTRIAL WELFARE SOCIETY
1 **London.** Welfare and First Aid Assistants' Course.
1 **London.** Canteen Demonstration at Gas Show Rooms.
2 **Edinburgh.** Afternoon Meeting on "The Next Ten Years."
2 **Leeds.** Welfare and First Aid Assistants' Course.
6 **London.** Evening Meeting on "Ethics and Management/Labour Relations."
8-10 **London.** Residential Course for Directors.

INSTITUTE OF GENERAL MANAGERS
3 **London.** First Annual Dinner.

INSTITUTE OF INDUSTRIAL SUPERVISORS
10-12 **Ashorne Hill, Leamington.** "The Practice of Supervisory Management."
10-12 **Missenden Abbey, Bucks.** "Industrial Relations, Industrial Law—What the Supervisor Should Know."

INSTITUTE OF INDUSTRIAL TECHNICIANS
7 **Manchester.** Talks and Discussion Group.

INSTITUTE OF PERSONNEL MANAGEMENT
1 **Manchester.** One-day Discussion Meeting.

INSTITUTE OF WELFARE OFFICERS
10 **Birmingham.** Evening Discussion of Case Studies with the Aid of Films.

INSTITUTION OF PRODUCTION ENGINEERS
6 **Bristol.** "How Much Management Can We Afford?"
9 **Halifax.** "A Scientific Approach to Management."

NATIONAL INSTITUTE OF INDUSTRIAL PSYCHOLOGY
6-10 **London.** Course in Selection Methods, Part III.

New Welfare Syllabus

THE Institute of Welfare Officers have revised their syllabus of education and training, which now comprises two principal parts, Intermediate and Final. Each part in turn breaks down into two sections (*a*) and (*b*). Part (*b*) of the Final paper provides alternative syllabuses for social welfare officers and industrial welfare officers. The standard of the papers and the marking is to be equivalent to that adopted for the Social Science Diploma. The Institute state that theoretical study can be done on a part-time basis or by correspondence where local facilities are not available. Practical work can be done in the student's home area, and while studying for the Intermediate examination, students can earn a living in any type of work; experience in Local Government, industry or commerce is considered essential. For the Final, practical work has to be undertaken which is closely associated with on-the-job training. The Institute point out that they do not undertake training, but are concerned only with the establishment of suitable standards of education and training and keeping these standards up to date.

Hostel Charges

REPLYING to a Parliamentary question, the Minister of Labour and National Service (Sir Walter Monckton) said that the charges for accommodation in industrial hostels run by the National Service Hostels Corporation on his behalf, were increased on October 18 by 7s. per week. The new charges were 54s. per week for men and 49s. for women at standard hostels, and 49s. and 44s. at sub-standard hostels where amenities fall somewhat short of the general standard. These charges covered, besides sleeping accommodation, two main meals a day on weekdays and three on Sundays, with common room, canteen, recreation and sick bay accommodation, and hot water and bathing facilities. During the financial year 1953-54, the income from charges fell short of the cost of providing the accommodation by about £930,000. It was estimated that the increase in charges would reduce the deficit by about £250,000 in a full year, on the basis of the same number of residents and assuming that costs remained steady.

Welfare Probe

IN their second annual report—for 1953—the Coal Industry Social Welfare Organisation record that their council is considering the desirability of undertaking a sociological study of typical mining districts, from which it might be possible to ascertain in what welfare facilities and activities should be replaced or improved, and how best a welfare impetus could be applied. It is suggested that such a survey would disclose gaps in the provisions of the Welfare State which needed to be made good by State, local authority, or voluntary action, and the survey would also provide a basis on which welfare work could be evaluated.

Anti-H-Bomb Training

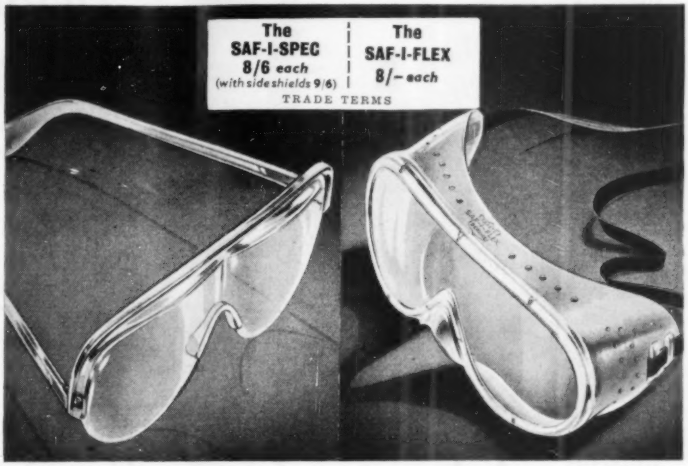
NOT until after the first six months of 1955 is industry likely to have its Civil Defence instructors trained in new anti-H-bomb methods. This was stated by Mr. North of the Home Office in reply to a question at a recent meeting of the London Branch of the Society of Industrial Civil Defence Officers. Mr. North said it was necessary first to concentrate on present instructors of Local Authorities and the new or revised form of training should be able to commence at approximately the middle of next year. Possibly a few in industry could be "squeezed in" with them. In reply to another question, Captain Harkness, principal officer for the London Civil Defence Region, said that in the event of war the dispersal of industry would be considered on a larger scale than ever.

Eye protection THE SAF-I-WAY

SAF-I products are light, smart, and comfortable—workers *like* to wear them. They are made in unbreakable plastic, with wide, replaceable 'Optilite' lens, which meet the specifications of the British Standards Institution for impact-resistance and optical excellence. SAF-I-FLEX and SAF-I-SPECS are the best protection-value money can buy, because they last so long.

Write for full details and prices to: Dept. H.4 Parmelee (G.B.) Limited, 176 Bedford Avenue, Trading Estate, Slough, Bucks.

SAF-I-FLEX AND SAF-I-SPEC (Registered trade marks) are patented products manufactured under licence by

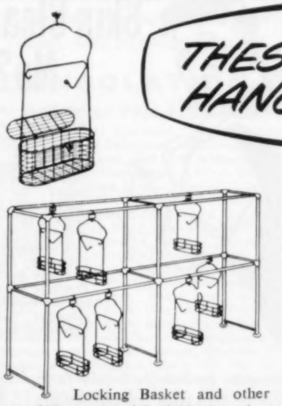


The SAF-I-SPEC	The SAF-I-FLEX
8/6 each (with side shields 9/6)	8/- each

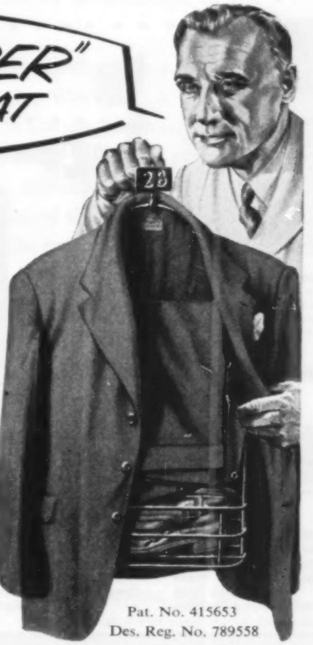
TRADE TERMS

PARMELEE (G.B.) LIMITED

MANUFACTURERS OF INDUSTRIAL SAFETY EQUIPMENT



Locking Basket and other types of Hanger to suit individual requirements, fully meeting the New Factory Act.


THESE AIR-DRY "SIEBER" HANGERS ARE A TREAT
28

"At last I can change into dry, uncreased clothing when I go home! It's plain common sense to hang rain-soaked 'togs' on a 'SIEBER' Hanger instead of bundling them into an unventilated, smelly locker. It saved me from many colds and my clothes are fresh and wear better. The boss, too, must like these 'SIEBER' Hangers because they reduce absenteeism and the space he saves is bound to repay the little money they cost. Repair cost? Not on your life, because this Hanger Equipment is made to last for good and all."

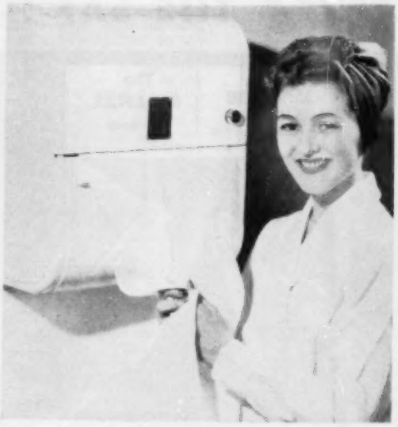
Pat. No. 415653
Des. Reg. No. 789558

SIEBER

ALL—IN—ONE
HANGER EQUIPMENT

Permanent Exhibit at Factory, Health and Welfare Museum, London, S.W.1.
Installed in Factories, Offices, Public Undertakings, Schools, Hospitals, etc.
Write today *for full details of our Free Planning Service.*

JAMES SIEBER EQUIPMENT CO. LTD., 30 Africa House, Kingsway, London, W.C.2. Tel.: HOL 4531 & 5121



clean towels for all

Here is the safest, simplest and best clean-towelling system yet devised—the Advance Towel Cabinet Service.

SAFEST, because every user has a clean space of towelling—and used towelling is returned to the cabinet, separate from the clean roll. No risk of spreading infection ; no drains blocked, as with throw-away towels.

SIMPLEST, because Advance does everything—installs and maintains the cabinets free of charge ; exchanges towelling at least once per week.

The cost? An all-inclusive 5/- per roll of towelling used.

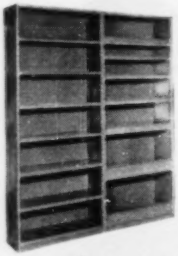
180 clean spaces per roll.

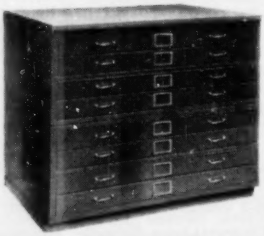
FULL DETAILS FROM :

Advance Linen Services Limited

STRATTON HOUSE, PICCADILLY W.1. MAYFAIR 8886

AWARDED CERTIFICATE OF MERIT OF INSTITUTE OF HYGIENE





. . . . For steel shelving

. . . . for seating

. . . for lockers

for plan files

Evertaut Service includes advice on seating and storage problems and the planning, manufacture and installation of equipment. Call on the experienced services of our Technical Staff.

Consult . . .

EVERTAUT LIMITED

- Office Seating
- Industrial Seating
- Canteen Equipment
- Steel Shelving - Heavy and Light Type
- Steel Library Shelving
- Cupboards and Lockers
- Planfiles
- Drawing Office Seating
- Worktray Storage Systems
- Punched Card Auxiliary Equipment

Please write for catalogue reference number 4G.

WALSALL ROAD, PERRY BARR, BIRMINGHAM 22b

'Phone : BIRchfields 4587 (4 lines)

'Grams : Evertaut, Birmingham

Skin Cleanser? Me?

Yes, You ! Any skin specialist will tell you that real trouble can start from dirt or grease-clogged pores only half cleaned and wholly unprotected by soaps and 'solvents'. It's commonsense to ensure that HOMACOL Antiseptic Skin Cleanser (in Homacol Economy Dispensers) is available in all washrooms. There is no surer cleanser for work-grimed skins—no stronger defence against industrial dermatitis.

Samples in Jelly or Liquid form will be sent with full particulars and prices on request.

HOMACOL

Antiseptic

SKIN CLEANSER

THE HORTON MANUFACTURING CO. LTD.

Rickmansworth, Herts

Telephone : *Rickmansworth 3191*

Telegrams : *"Liquisopa," Rickmansworth*

F 53

Plus Fifty

Protective Footwear

RHYMING-LINE COMPETITION

WINNERS

FIRST **£50** PRIZE

Because of equal merit this has been divided between—

Mr. R. H. JOHNSON,
9 Jeffcock Road, High Green, Sheffield
(Newton Chambers and Co. Ltd., Thorncliffe)

Mr. W. W. EDGE,
19 Reeves Way, Peterborough
(F. Perkins, Peterborough)

Mr. L. GREGSON,
231 Warwick Road, Kenilworth
(Courtaulds, Coventry)

Mr. W. L. JONES,
24 Third Avenue, Sandbach, Cheshire
(Murgatroyds Salt and Chemical Co., Sandbach)

Mrs. D. SPEDDING,
1 Grove Street, Smethwick, Staffs.
(Guest, Keen and Nettlefolds Ltd., Birmingham)

CONSOLATION PRIZES

A pair of Plus Fifty Boots or Shoes

Mr. T. W. Gibson, 11 Spellman Grove, Dormanstown, Redcar (*I.C.I. Middlesbrough*), Mr. H. Fairhurst, 16 Barnes Road, Halton View, Widnes, Lancs. (*W. J. Bush and Co. Ltd., Widnes*), Mr. B. A. Pemberton, 8 Coroner's Lane, Widnes, Lancs. (*W. J. Bush and Co. Ltd., Widnes*), Mrs. M. Oakes, 14 Hope Street, Prescot, Lancs. (*Wm. Neill and Son (St. Helens) Ltd., Lancs.*), Mr. H. Riley, 14 Allds Street, Great Moor, Stockport, Cheshire (*Mirrlees Bickerton and Day, Hazel Grove*), Mr. G. W. Forster, c/o 62 Oxney Road, Newark, Near Peterborough, Northants (*F. Perkins Ltd., Peterborough*), Mr. A. J. Eastwood, 52 Lockley Crescent, Hatfield, Herts. (*De Havilland Propellers Ltd., Hatfield*), Mr. A. Roberts, 20 Tudor Avenue, Bebington, Cheshire (*The British Extracting Co. Ltd., Birkenhead*), Mr. D. Mazey, 57 Lindsworth Road, Kings Norton, Birmingham 30), (*Guest, Keen and Nettlefolds (Midlands) Ltd., Birmingham 30*), Mr. A. A. Marvin, 39 Trinder Road, Warley, Staffs. (*Guest, Keen and Nettlefolds, Birmingham*), Miss S. M. Neve, 136 Motum Road, Norwich, Norfolk (*Norwich Manufacturing Co.*), Mr. G. Tomlinson, 4 Horace Avenue, Cave Street, Beverley Road, Hull, East Yorks. (*Ideal Boilers and Radiators, Hull*), Mr. W. G. Swindells, 38 Higher Bents Lane, Bredbury, Nr. Stockport, Cheshire (*Mirrlees, Bickerton and Day Ltd., Stockport*), Mr. G. W. Whiteley, 46 Kirklees Road, Hillside, Southport, Lancashire (*Ward and Goldstone Ltd., Salford 6*), Mr. K. Payne, 11 Oakfield Road, Clifton, Bristol 8 (*Cumberland Welding Co. Ltd., Bristol*), Mr. C. A. Darrington, 13 Pratt Lane, Windhill, Shipley, Yorkshire (*Murgatroyd and Barrett Ltd., Shipley*), Mr. A. H. Wells, 30 Vivian Avenue, Wembley, Middx. (*Brillo Mfg. Co. Ltd., London*), Mr. W. J. Sherwood, 31 St. Albans Road, London, N.W.5 (*Edmonton Borough Council*), Mr. A. M. Smith, 7 Woolliscroft Avenue, Maybank, Newcastle-under-Lyme, Staffs. (*Simplex Electric Co. Ltd., Staffs.*), Mr. D. Joyce, 256 Crawley Green Road, Luton, Beds. (*Roche Products Ltd., Welwyn Garden City*), Mr. E. B. Campbell, 131 Park Grove, Kingston-upon-Hull, Yorks. (*Ideal Boilers, Hull*), Mr. L. Marshall, 68 Colwall Avenue, Ledbury Road, Priory Road, Hull, E. Yorks. (*Ideal Boilers and Radiators Ltd., Hull*), Mr. P. I. Worrall, 20 Chandos Road, Heaton Chapel, Stockport, Cheshire (*Ferodo Ltd., Derbyshire*), Mr. R. Grigg, 4 Tower Place, Clackmannan, Scotland (*Ind Coope and Allsopp, Scotland*), Mr. R. A. Walton, 13 Meadway, Hough Green, Widnes (*W. J. Bush and Co. Ltd., Widnes*).

PROTECTIVE FOOTWEAR SERVICE LTD. · KINGSWOOD · BRISTOL

I accept the appointment . .

can the Company help me to buy a house, sir?

The problem of the executive or key worker who is unable to find the deposit to purchase a house can be solved without cost to the Company.

The Guarantee House Purchase Plan of the Wesleyan & General Assurance Society has been specially designed to meet this problem, and, in addition, provides for cancellation of the mortgage in the event of the employee's death.

Information regarding this plan will be given, in confidence, upon application to :

WESLEYAN & GENERAL
Assurance Society
STEELHOUSE LANE
BIRMINGHAM 4
Established 1841

Specialists in House Purchase for 30 years

Suitable for Every Industry
INCOMPARABLE IN MINES
INDISPENSABLE IN ENGINEERING
INVALUABLE IN STEELWORKS
SAFETY FOOTWEAR,
TOSAVA'S

BRIGGS INDUSTRIAL
FOOTWEAR LIMITED

17-23 DOVER STREET
LEICESTER TEL. GRANBY 471

PROTECTIVE CLOTHING SPECIALISTS

Overalls, Coats and Jackets
for both
Men and Women

★ Hard-wearing Pre-Shrunk Materials.
★ Practical Designs in a wide range of stock sizes.
★ Expertly cut on generous lines.
★ Attention to detail—Extra strengthening at points of strain.
★ Fast Colours.
★ Quality and Workmanship guaranteed.

Let the name GARROULD be your guarantee of satisfaction. Our garments are backed by over 100 years' experience in the manufacture of protective clothing. They are not merely overalls but distinctive garments that will satisfy the most discriminating buyer.

Full particulars and prices sent post free.

Actual Manufacturers :

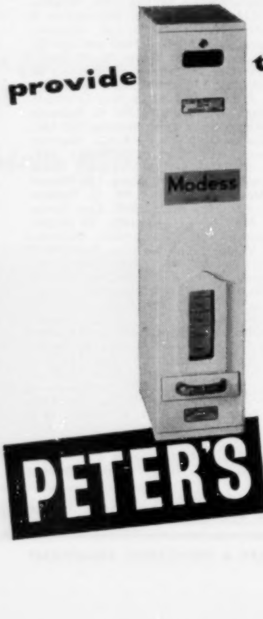
E. & R. GARROULD LTD

Established over 100 years

150-162 EDGWARE ROAD, LONDON, W.2

Peter's
SANITARY TOWEL
Vending Machines

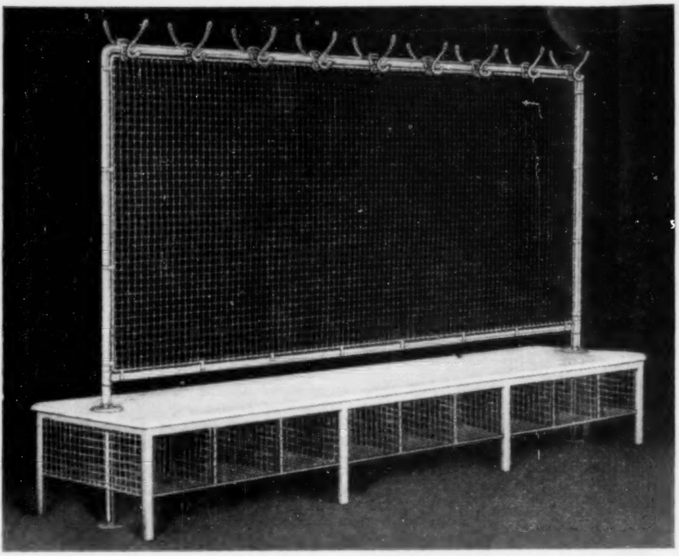
provide these advantages


Modess
PETER'S

- A mechanism that can be adjusted to operate on any number of coins.
- A choice of brands—soluble and non-soluble.
- An assurance of unlimited supply.

Particulars from

AUTOMATIC MACHINES
LIMITED
1 Ladbroke Road
London, W.11
Telephone: PARK 7608



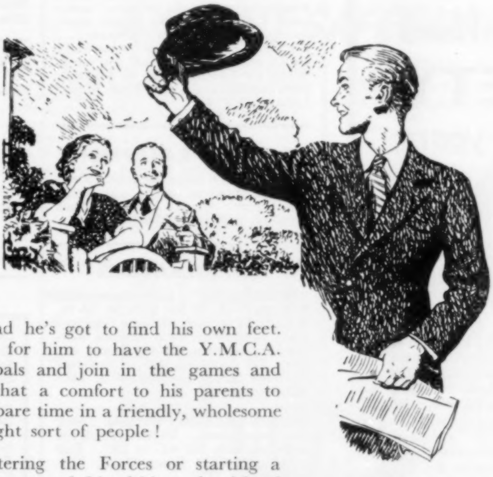
Cloakroom Fittings

Harvey Fittings have been designed to meet the requirements of all modern cloakrooms. The double-sided island stack illustrated here is approx. 5′ 6″ high and is constructed of tubular framework enclosing a wirework panel. The wooden seat is supported by an angle frame and tee bar legs, incorporating boot and shoe compartments approx. 12″ wide × 9″ high × 12″ front to back.

Fig. No. 2616: Also available single-sided for wall positions or base unit alone can be supplied together with hat and coat hooks for wall fixing. For complete range, please ask for List No. PMT 879.

Harvey

G. A. HARVEY & CO. (LONDON) LTD., Woolwich Road, London, S.E.7 (Telephone : GREenwich 3232, 22 lines)



John's starting out in the World . . .

He's earning his living and he's got to find his own feet. What an advantage it is for him to have the Y.M.C.A. where he can meet his pals and join in the games and hobbies he likes. And what a comfort to his parents to know that he spends his spare time in a friendly, wholesome atmosphere among the right sort of people!

Many a young man entering the Forces or starting a civilian career finds lasting personal friendship and spiritual support in the Y.M.C.A. But the need for its service grows daily greater.

Please send the most generous donation you can afford to help the Y.M.C.A. to extend its work.

Y.M.C.A.

Donations may be sent to the Rt. Hon. The Earl of Athlone, K.G., G.C.B., President of the Y.M.C.A. National Service and General Fund, 112 Great Russell Street, London, W.C.1

FACTORIES & CANTEENS

Improved Seamless Composition Floors

also

TERRAZZO TILES - STAIRCASES
WALLS - ENTRANCES - STALLRISERS,
etc.

FLOORCRAFT
DURO PAVIORS LTD
249 St. John Street, London, E.C.1
TERminus 9676

DEAR MR. NU-SWIFT,

Of course, we've some fire extinguishers, but are they up-to-date? Please ask your man to call and check them—ahead of that Fire Fiend!

Name ....

Address ....

MAIL NOW to Nu-Swift Ltd., Elland, Yorks.

ELLISDONS

NEW 100 page illustrated catalogue

OVER 2000 INTERESTING ITEMS

MAY WE SEND YOU A COPY?

NOVELTIES
ELLISDONS

Novelties · Jokes · Tricks · Puzzles · Magic · Games · Toys · Party· Carnival and Sports Goods · Musical Instruments · Fountain Pens · Watches · Clocks · Gifts · Household Lines · etc.

Please send 4d. stamp with name and full address in BLOCK LETTERS.

If convenient, we invite you to call and inspect our 5 floors of displayed merchandise. Our store is open daily 9 a.m.—6 p.m. Saturday 1 p.m.

ELLISDONS

(DEPT. 90) 245-247, HIGH HOLBORN, LONDON, W.C.I

(Half minute from Holborn (Kingsway) Underground next door to Pearl Assurance)

The watch-dog of workers

HAND SAFETY

for over sixty years

W. B.
EVERTRUSTY
GLOVES for every industrial purpose

Since the birth of industrial safety, the famous "EVERTRUSTY" trademark has distinguished the best from the second best in industrial gloves, goggles, respirators, clothing and other safety appliances. For free illustrated catalogues of the "EVERTRUSTY" range of what is latest and best in Safety products write for catalogues No. 11.

WALLACH BROS. Ltd.

For over sixty years specialists in Industrial Safety

49 TABERNACLE STREET, LONDON, E.C.2

CLASSIFIED ADVERTISEMENTS

Rate: 2/6 per line, minimum 5/-; average 24 letters per line, box numbers to be paid for as 2 lines. Display panels: £1/10/- per single column inch. Series discounts: 5% for 6 insertions, 10% for 12. Payments must accompany order for single insertions. Address orders to: Advertisement Manager, PERSONNEL MANAGEMENT, WELFARE & INDUSTRIAL EQUIPMENT, 180 Fleet Street, London, E.C.4. Telephone: Chancery 8844.

THE engagement of persons answering advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 *inclusive or a woman aged* 18-59 *inclusive unless he or she, or the employment, is excepted from the provisions of the Notification of Vacancies Order,* 1952.

FILM & RECORDING SPECIALISTS

16mm. FILM PRODUCTION SPECIALISTS ! ! — Ampro film projectors £265 and Grundig Tape recorders from 35 gns. Brochures from : Diamond Films, 151a High Street, Slough. Tel. : 25694.

BUSINESS PROPOSITIONS

How can YOU profit by direct mail advertising? Direct appeal; quick results; timeliness; privacy; complete control at every stage; *more orders, at fractional cost per sale . . .* it's all in "How to Sell Successfully by Direct Mail", just off the press. Write for Leaflet DM4 to Business Publications Ltd., 180, Fleet Street, London, E.C.4.

CANTEEN EQUIPMENT

FISH RANGE taken for debt. Keen price accepted to clear ; also Jackson Boiler.—A. R. C., 130 Great Portland Street, London, W.1.

REFRIGERATORS

"FRIGIDAIRE" Low-temperature Refrigerators, 49 in. wide by 28 in. deep by 34 in. high, ex-large National User, suitable for deep freezing, storing of ice-cream, frozen foods, etc. Price £29 each.—A.R.C., 130 Great Portland Street, London, W.1. Tel.: MUSeum 4480.

REFRIGERATORS for sale. New and Guaranteed. 20 per cent off list price, suitable for AC or DC. Full particulars—139 Essex Road, N.1. Canonbury 2871.

BOOKS

BOOKFARE WELFARE—We specialise in providing workers with first-class reading entertainment at cost—no instalment or maintenance charges.—For full details write to: REX LIBRARY SERVICE (s), 135a Goswell Road, E.C.1. CLE. 0351.

SITUATION VACANT

A TRAINING OFFICER with T.W.I. experience—preferably all 3 courses—is wanted for the Scottish Factories of Patons & Baldwins Ltd., to develop existing training schemes. Besides training experience, the selected candidate must have energy, adaptability, good self-expression, and a readily acceptable personality. Salary will depend on age and experience.—Applications should be addressed to Personnel Manager, Patons & Baldwins Ltd., Alloa, Clackmannanshire.

CARNIVAL NOVELTIES

Organisers of Xmas parties, dances, etc., should write for our catalogue of toys and dance novelties at wholesale prices to Fanfare Productions, 135, Canterbury Road, N.W.6.

Toys, Prizes, Fancy Goods. Fund Raisers. Everything for your Bazaar and Party. Send stamp for Wholesale Catalogue. Swinnertons, Tantarra Street, Walsall. Dept. 'C'.

TUITION

INFORMATIVE CAREERS GUIDE, 100 pages, free. Specialised postal coaching for Examinations of Institute of Personnel Management and Institute of Industrial Administration. Courses also for all Accountancy, Costing and Secretarial Examinations and in all Commercial subjects. Intensive coaching for General Certificate of Education. Forty-four years of successful educational service for Commerce and Industry. Send for your copy of the Guide to Careers today.

THE SCHOOL OF ACCOUNTANCY

212, Regent House, 6, Norfolk Street, Strand, London, W.C.2

STRENGTH and GRACE
combine in E.S.A. Light Alloy Furniture

These modern pieces are typical of our range of pressure die-cast furniture. It is extremely strong, yet very light. The table has a scorch-proof, easy-to-clean Formica top; both arm-chair and stackable chair are supplied with either upholstered or plywood seat and back.

Write for folder giving details of these three items and others in the range of furniture, including wooden furniture.

Specially designed for OFFICES, HOSPITALS, CANTEENS, HOTELS, CAFES, CLUBS.

THE EDUCATIONAL SUPPLY ASSOCIATION LIMITED

Esavian Works, Stevenage, Herts. Tel: Stevenage 500.

A SMART SAFEGUARD

That "happy ship" spirit, as every Welfare Officer knows, is all-important to production. Give your women workers DINKUM OVERALLS, and see how they respond to protective clothing that they can wear with an air! DINKUM OVERALLS, stylishly tailored in smart modern colours, are a positive asset to morale.

DINKUM STAR POINTS

- ✱ Generously cut to B.S.I. specification.
- ✱ Self-coloured or contrast collar and cuffs.
- ✱ Embroidered monograms, badges, etc., available.
- ✱ In white and twelve fast colours.

Manufactured and Distributed by

Samples and Quotations on request

DINKUM REGD

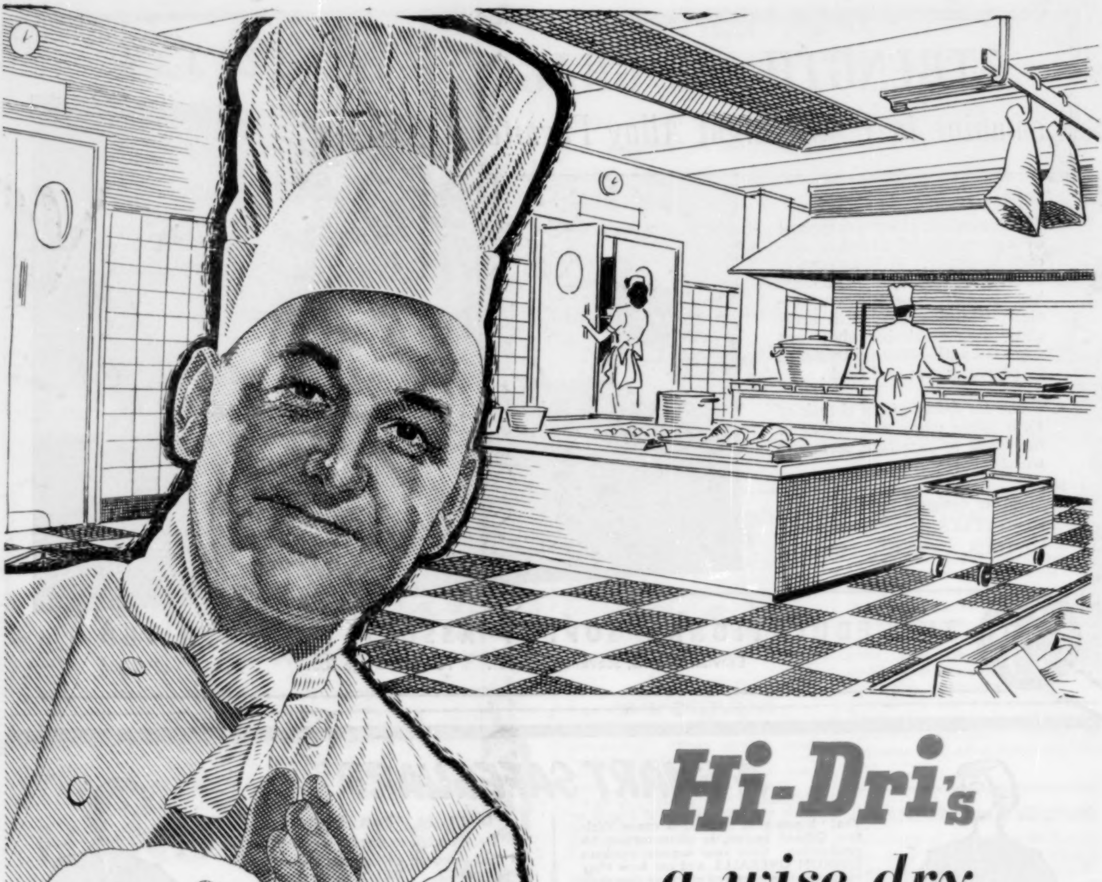
ANGUS JOWETT & CO. LTD.

SKELTON INDUSTRIAL ESTATE, SALTBURN-BY-SEA, YORKS

Telephone: Skelton 142

Established 1911

KA



Hi-Dri's

a wise dry

THE CHEF KNOWS that his job in the kitchens calls for Hi-Dri Paper Towels . . . the *easiest, quickest* and *cleanest* he can use. Hi-Dri washroom service gives a clean towel for *every dry.* Just take, use, destroy. All over in a second or two. No queueing, no waiting, no wasted man-hours ticking away. No laundry bills—but a clean bill of health . . . Hi-Dri Sales Service too. Dispenser cabinets supplied free on loan. Personal attention ; Hi-Dri representatives call on request.

PHONE FOR A FREE
DEMONSTRATION TODAY
Victoria 1951/2

Reed

REED PAPER HYGIENE LTD.,
11 GROSVENOR GARDENS, WESTMINSTER, LONDON, S.W.1.

Printed for the Proprietors, The Shaw Publishing Co. Ltd., 180 Fleet Street, E.C.4. (CHA. 8844), by Knapp, Drewett & Sons Ltd., London and Kingston-on-Thames December, 1954. Advertisement and Editorial Office, 180 Fleet Street, London, E.C.4.